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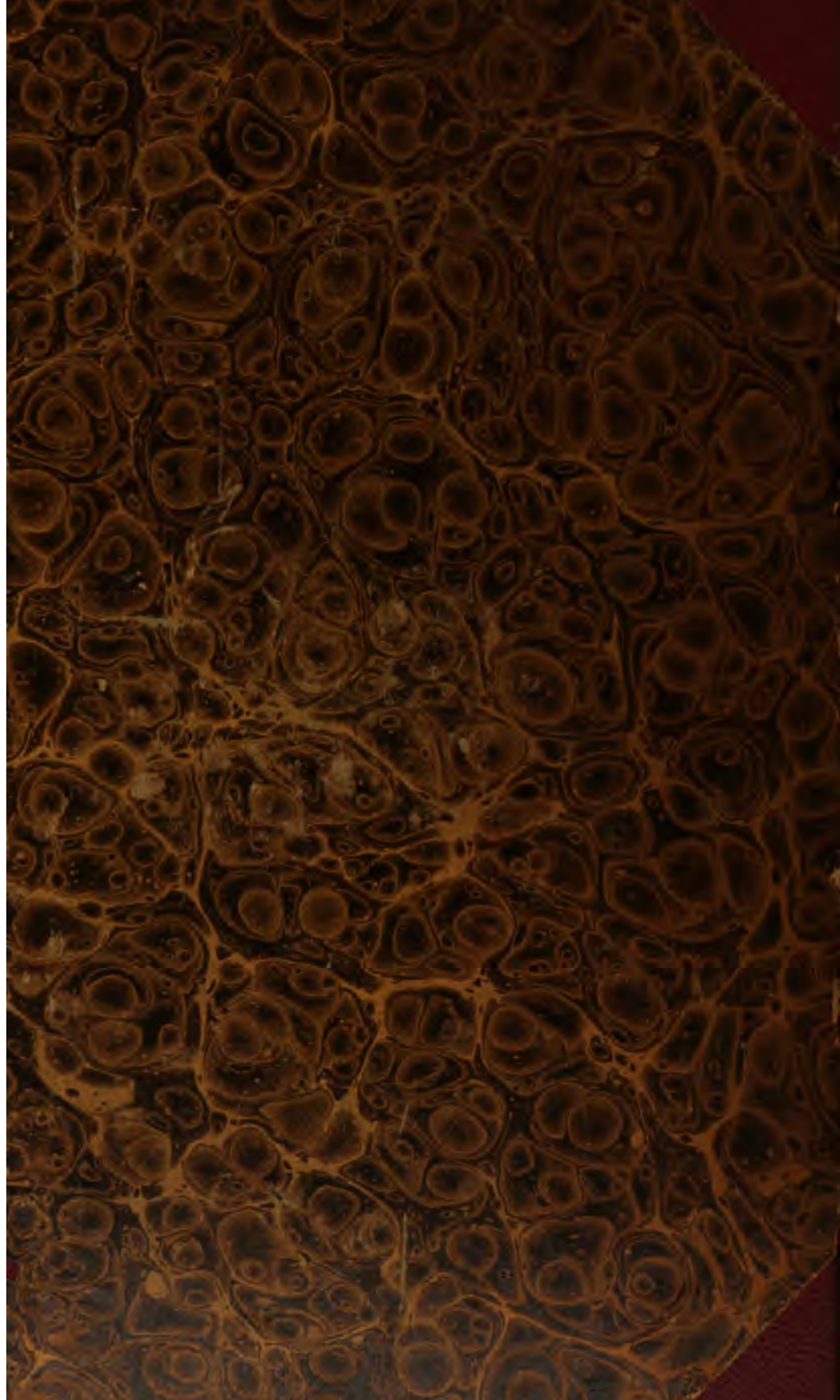
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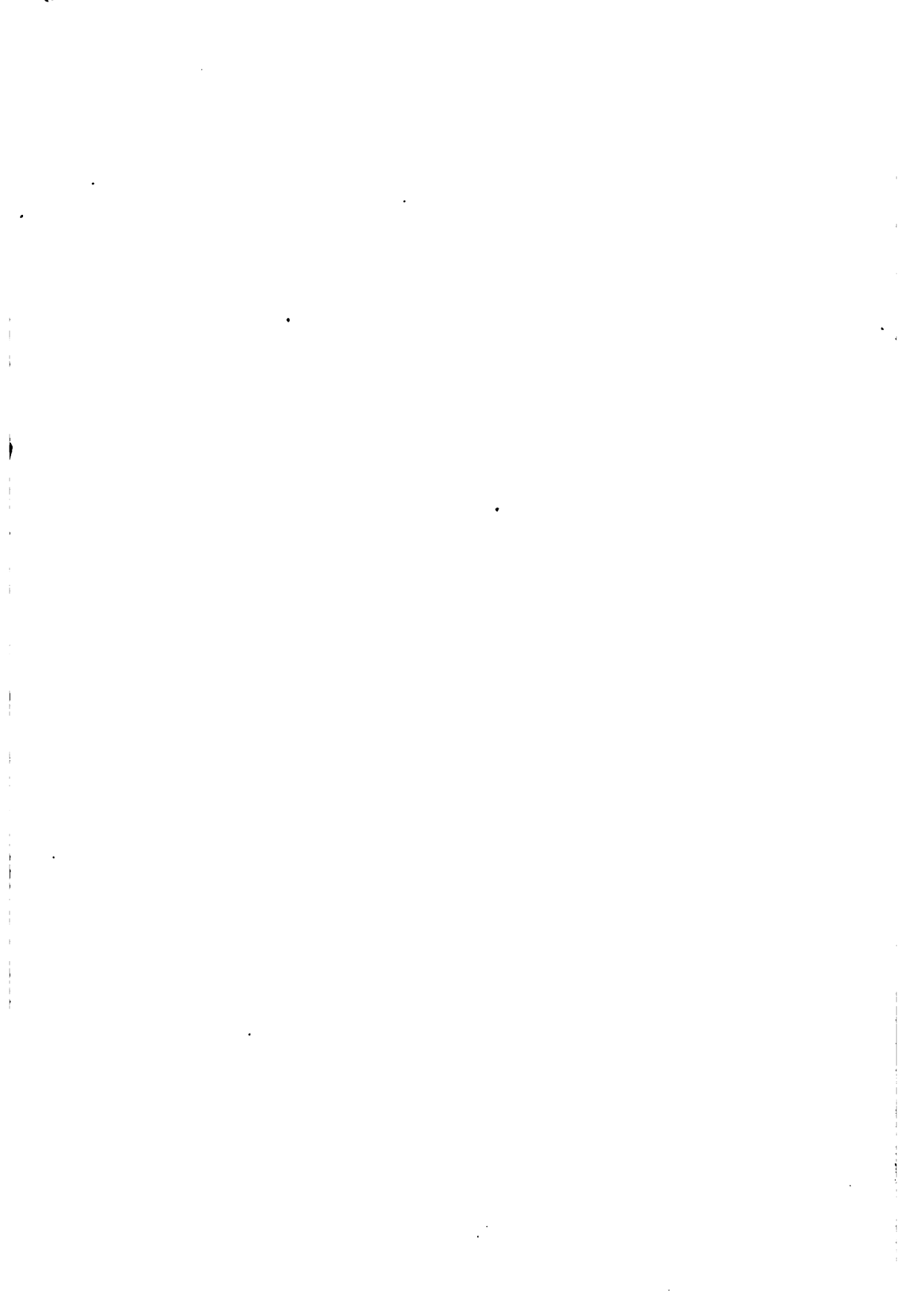
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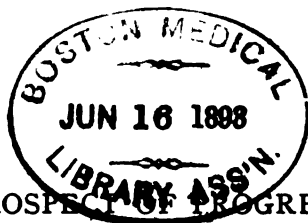








THE  
EPITOME OF MEDICINE



A MONTHLY RETROSPECT OF PROGRESS IN ALL DIVISIONS  
OF MEDICO-CHIRURGICAL PRACTICE

EDITED BY

JAMES E. NEWCOMB, M.D.

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VOL. IX.

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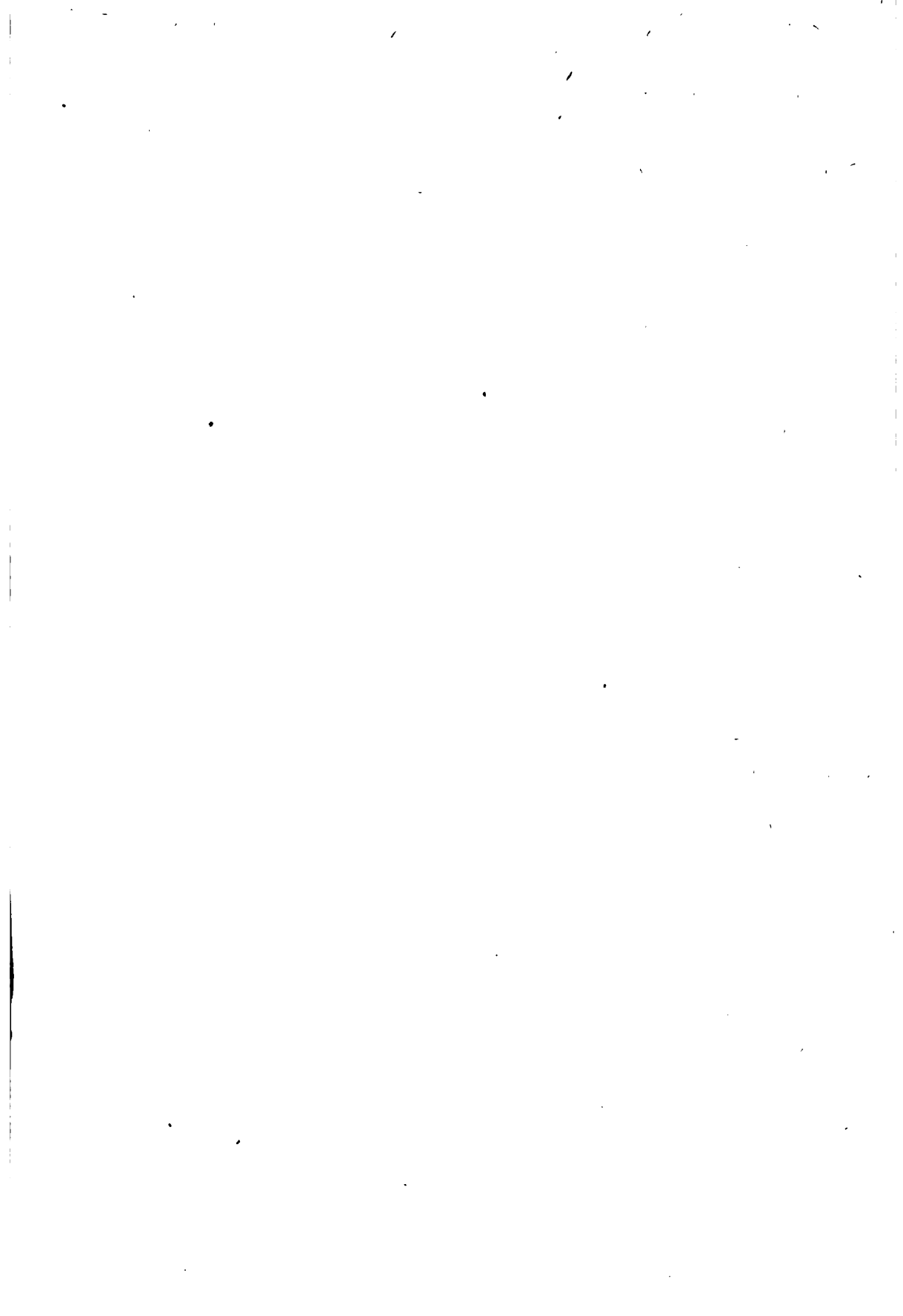
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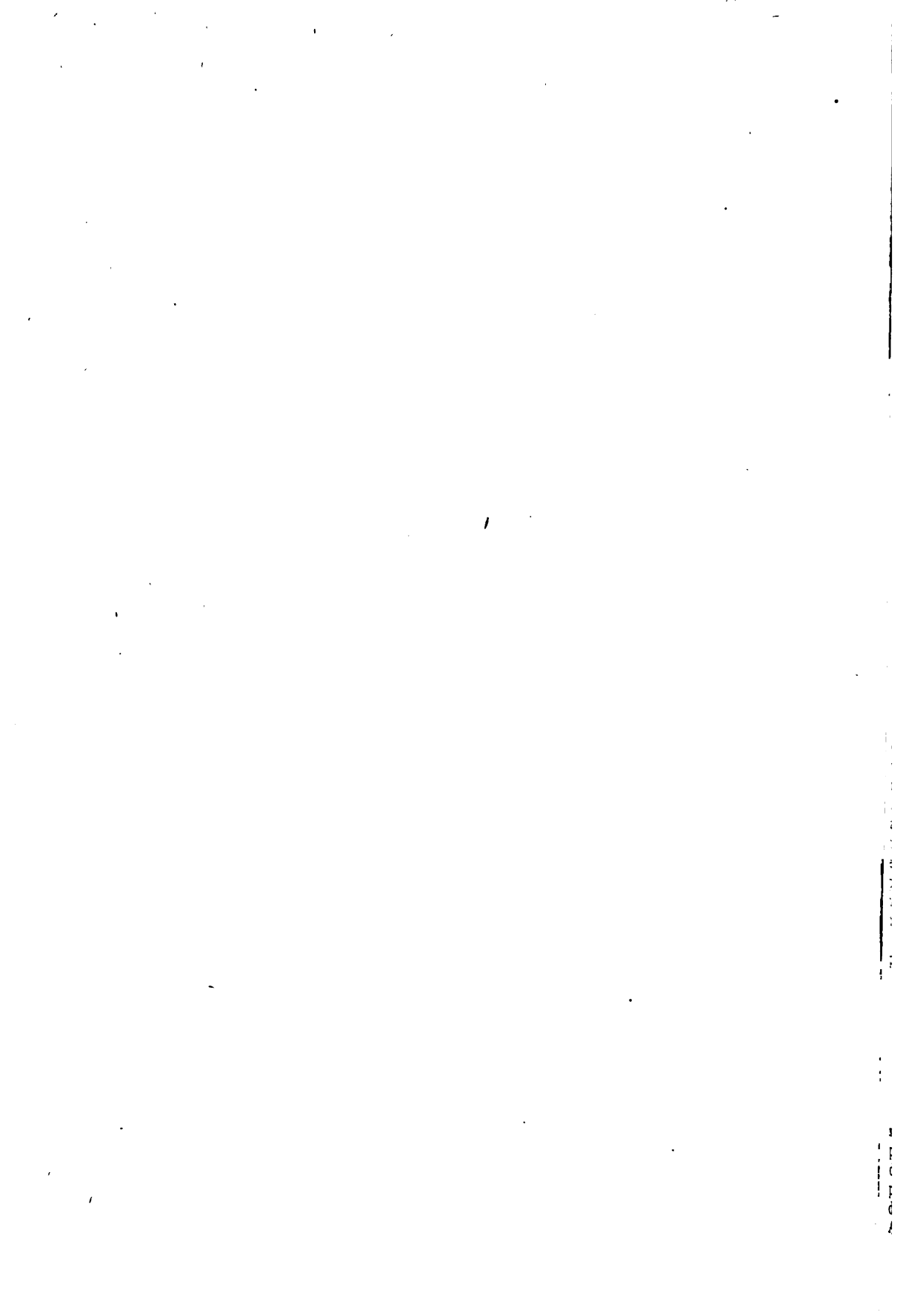
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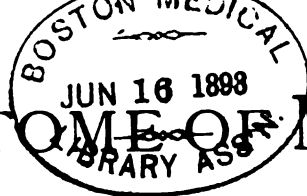
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# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

VOL. IX., No. 1.

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## EDITORIAL ANNOUNCEMENT.

With the present issue commences the ninth volume of the EPITOME. While the journal has been issued under different names, it has had an unbroken existence, and the opening year finds its management ready to continue its work for the coming twelvemonth with unabated zeal.

To no one did the change in the editorial management come with greater surprise than to the present editor. At almost a moment's notice he was called upon to commence his duties, and the present is really the first opportunity that he has had to say what is usually expected from the new incumbent of a long-established office. He desires to thank the retiring editor for the kind words which graced his last official communication to the EPITOME, and which were published in the December number. And especially does he congratulate both the subscribers and himself that all the staff of collaborators have consented to continue their valuable services. Several associates have been added and others perhaps may be. No effort will be spared to secure and retain representative ability in every department of medical literature.

The present editor can speak of the past history of the journal from an imper-

sonal standpoint, and can bear testimony to the high character of the contributions its columns have contained. It has discountenanced all forms of quackery and has been quick to recognize and uphold truth, no matter how lowly its source. Striving to be, in the best sense of the term, scientific, it has not catered to that class of readers who are not content unless a "funny column" is appended to every issue. It was believed that there is in the profession a large body of men who have no time to follow general literature, but who appreciate well selected summaries. Our collaborators have endeavored to serve this class. They have not handed in mere clippings from other articles, but they have given the substance of the original articles, and have thus presented in their respective departments the most important facts of medical progress.

To maintain this high standard will be the endeavor of the present editor. He will be glad to receive communications from any subscriber relative to the journal. Though the date of issue renders a New Year's greeting a tardy one, yet he begs leave to extend to every reader of the EPITOME his best wishes for their prosperity throughout the coming year.

JAS. E. NEWCOMB.

## LEADING ARTICLE.

### THE SHURLY-GIBBES TREATMENT OF PHTHISIS.

The old search for the philosopher's stone was a vain one, and there are many pessimistic therapeutists at the present day who tell us that the search after positive remedies against the tubercular diseases is likely to be equally in vain. As long, however, as the tubercle bacil-

lus can claim, as it can now, to be the cause of one death out of every seven that occur the wide world over, just so long will men, eager to solve the problems which its life history presents, devise one means after another to stay its ravages.

The last two years have seen the birth and death of several "sure cures" for phthisis. The sulphur-gas enemata made many hopeful, but were soon relegated to

oblivion. The hot-air treatment of Weigert, after deceiving some of the very elect, was shown to make claims physiologically impossible. Tuberculin caused the great pilgrimage of modern times to be made to the German capital; but over against all these, and many more we might mention, the finger of time and experience has written Ichabod. Creosote has perhaps held its own.

If we might name a characteristic of some of the modern suggestions regarding the successful treatment of tubercular diseases, it is that they try to assist nature. They do not introduce so much the idea of combating the cause of disease as that of rallying to the assistance of nature in her universal effort to lessen the dangers of all pathological processes. What this conservatism is we have learned from the autopsy table, and, in a relatively small number of cases, from careful observation of the living subject. It is, in a word, to surround the harmful nidus by a zone of tissue of such a nature that the former will be circumscribed in its effects and finally either be cicatrized or perhaps entirely obliterated. To bring about this process various medicinal agents have been introduced into the system. Chloride of zinc and cantharidinate of potash are among the most recent remedies suggested for this purpose. Still more recently have come the suggestions, from two well-known and reputable physicians in the West, in favor of chlorine-gas inhalations, together with the hypodermatic use of iodine and the chloride of gold and sodium. There is no secrecy put forth concerning the method. It is based, its advocates assert, upon scientific principles. It is capable of being used by all physicians. Under these circumstances its claims deserve more than a passing notice.

In a very sensible article upon the treatment of tubercular disease, Dr. N. B. Shade, of Washington, D. C., sums up the indications as follows;

1. Remove the cause—that is, break up the soil in which the germs develop. In doing this the predisposition or susceptibility, whether inherited or acquired, is greatly modified, and in some cases wholly annihilated.

2. Restore the power of assimilating food and thereby increase the volume and improve the quality of the blood.

3. Repair damaged lung and throat tissue.

On these points doubtless all will agree, but when we come to judge the method by

which these happy results may best be obtained we have almost as many opinions as advocates. Very often the good results claimed for a certain plan of treatment are closely interwoven with the effects of climatic change, the tonic properties of a free use of cod-liver oil, etc., so that it becomes difficult to analyze the final product and to assign to each factor its due meed of praise.

The new method under discussion has not been on trial long enough yet to give a very complete account of itself, and in some of the cases reported as benefited there have been other therapeutic adjuvants. (It is perhaps of some interest to note that "tuberculin," so called, is the only remedy which has really been tried on its merits pure and simple, and tuberculin turned out to be the "light that failed.") Yet we must not give up the search for the golden remedy, and must willingly examine any new evidence put forth by conscientious observers.

In the last number of the *Therapeutic Gazette* (Dec. 15th) Dr. H. L. Taylor, of Ashville, N. C., reports his results with the Shurly-Gibbes method. He does not claim permanency of result, for, as he justly remarks, permanent results can only be claimed when years have elapsed without any active symptoms showing themselves. Rightly does he condemn the very prevalent practice of calling certain suspicious causes of chest disease merely bronchitis or catarrh, thus lulling the patient into a false security, missing his hearty co-operation in the treatment, and allowing precious time to go to waste. Dr. Taylor's results may be summarized as follows:

Total number of cases, twenty-two.

Advanced cases, with no improvement in their condition, six, or twenty-seven per cent. of the whole number.

Advanced cases, with improvement, eight, or thirty-six per cent. of the number treated.

Cases which have shown very great improvement, including advanced and incipient cases, eight, or thirty-six per cent. of the total.

It is impossible to compare these results with those obtained (without the injections), in those cases in which reliance was placed entirely upon climatic and tonic treatment, with attention to symptoms as they arose, for two reasons.

The first is, that many cases are so far advanced that euthanasia is the one

object of all treatment. They cannot oftentimes even reach their homes alive. Such cases would throw the balance at once to the side of the Shurly-Gibbes treatment, and evidently unjustly.

The second reason is, that, in parallel cases, the comparison could only be made with those who have refused the Shurly-Gibbes remedies,—patients who have not had the courage to undergo the treatment. The temperament of such cases is against them in their battle for health.

Dr. C. E. Bean, of St. Paul, reports (*Northwestern Lancet*, Dec. 15th) forty cases treated in this manner. From the six clinical histories given, we learn that five patients were benefited and one remained stationary,—not being affected, apparently, by the treatment one way or the other.

Regarding the technique, the following may be said :

The treatment consists first in the daily hypodermic injection of iodine. The solution, as used by the originators of this treatment, is of the strength of one grain to the fluid drachm, the menstruum for the iodine being a ten-per-cent. solution of glycerine in distilled water. The injection is very painful, and this is its chief objection. One of the best solutions as regards pain has been with egg albumen, but in some cases iodism was not produced as rapidly as when the solution was made in the presence of glycerine, and in other cases no effect was produced by the injections, owing to the slow oxidation of the iodine when injected. The effect in every case was slower than when the solution made from the original formula was used. The dose of the iodine to begin with is one twelfth of a grain ; this is gradually increased to as high as one grain, though in very few cases is it necessary to give more than one half a grain for the maximum dose. When the patient is thoroughly iodinated, the injections of the solution of the chloride of gold and sodium are begun, commencing with a dose of one thirtieth of

a grain, and gradually increasing until one third of a grain is being given. Usually it is better to alternate the gold and sodium with the iodine.

Inhalations of the chlorine gas, which are commenced with the beginning of the treatment, can be given either through the inhaler, as recommended by Drs. Shurly and Gibbes for office treatment, or by developing in a closed room the chlorine gas by pouring on ordinary bleaching powder a twenty-five-per-cent. solution of hydrochloric acid, after the atmosphere of the room has been thoroughly saturated with a solution of the chloride of sodium. If it is administered by means of the inhaler, it is in the proportion of from one to two drachms of chlorine water, U. S. P., to an ounce of a saturated solution of chloride of sodium, and sprayed into the inhaler. When there is no secretion in the bronchial tubes, the inhalations need to be given only every two or three days, but when the exudation is profuse it may be necessary to give as many as three inhalations daily. Again is this the case where there is tuberculous laryngitis.

There is a wide diversity in the first effects produced by this treatment. In some cases there is great mental depression, elevation of temperature, anorexia, and decrease in weight. In other cases there will be almost from the beginning increased appetite, lowered temperature, increase in weight, better spirits, and more sleep at night.

In some cases of ulcerative tubercular laryngitis the chlorine gas inhalations are too irritating. A spray of menthol and creosote has been substituted by Dr. Taylor with good effect. In most every case the gas is liable to cause slight coughing. None of the authorities who have used the remedy feel certain as to how it acts. The gold salts and the halogens are all distinctly germicidal. Do they act directly on the bacilli, or upon the toxalbuminose the latter produce? This the future must answer.

## RECENT FRENCH CONTRIBUTIONS TO MEDICINE.

**Rondot on Hemorrhagic, Pleuritic Thickening and its Relation to Chronic Pulmonary Tuberculosis.**—The author regards the co-existence of these two conditions as rare, but there are two different circumstances under which

it may occur. The hemorrhagic effusion can coincide with the presence of tubercles on the pleura of the affected side, or exists with no other lesion than very vascular membranous deposits, while one determines the existence of tubercular foci on

the other side of the thorax. In the latter case one would ordinarily recognize the fact that he had to do with a growth of miliary tubercles which had supervened in the course of an older pleurisy. The hemorrhagic pachy-pleuritis which would then appear primary in the sense that no tubercular changes could be discovered on the side where it was developed, is, nevertheless, a synchronous manifestation of the extension of the tubercular process analogous to what takes place following injections of tuberculin in certain phthisical patients.

In regard to the diagnosis of these cases Rondot advises early exploratory puncture under the most rigid antiseptis. If the fluid is more or less bloody in the acute and primary cases, the revulsive effects of the procedure can be productive of only good results; but he advocates thoracentesis, even before any urgent symptoms show themselves. A single puncture may lead to a cure in some cases, if the fluid (say one litre in amount) is slowly withdrawn.—*Gaz. heb. des Sci. Méd.*, Oct. 11, 1891.

**Mairet and Bosc on Toxicity of Pathological Urine.**—The authors have injected into rabbits by the intravenous method the urine of patients affected with mania, stupor, senile dementia, delusions of persecution, etc. The results obtained show that the urine of the excited insane persons is very poisonous, while that of the quiet insane is no more injurious than that of a healthy man. In fact, the poisonous effects vary according to the form and especially the acuteness of the malady.—*Le Courrier Médical*, Oct. 17, 1891.

**Imbert de la Touche on Electricity in Gout and Rheumatism.**—The writer's conclusions are as follows:

1. Electricity is of undoubted value in the treatment of both diseases.

2. The method is based upon the introduction into the tissues of medicinal agents by the cataphoretic action of the voltaic current, and upon the employment of a high intensity of the same, in order to obtain a tonic effect upon the system.

3. The local results are the lessening of the gouty deposits and of the peri-articular inflammations; the lessening of the pains, and a much greater motility of the joints, and especially much greater ease in walking.

4. The general effects are shown in an

increase of vital energy, improved digestion and appetite, more natural sleep, and greater regularity in intestinal evacuation. *La France Médicale*, Oct. 2, 1891.

**Lavrand on Pyoctanin in Mammary Cancer.**—A woman, aged fifty, had an ulcerating cancer on the right breast with such diffuse glandular involvement as to render surgical interference inadmissible. The tumor presented two lobes separated by a furrow; the posterior lobe was the seat of intense pain and repeated hemorrhage. During a period of ten days the author made three injections of a Pravaz syringeful of a solution of pyoctanin 1-300. The injection was deeply given and only caused a moderate amount of discomfort. A week after the last treatment the posterior lobe (site of injection) took on a violet hue, the pains were quieted, while the hemorrhage ceased. Two weeks after the same lobe became yellowish-white in color, and came away in large shreds of a cheesy consistency. Nevertheless, the cachexia continued, and the patient only lived a month longer. During the whole time the anterior lobe preserved its red color. The pyoctanin, however, appeared to control the pain and stop the loss of blood. The writer has observed the remedy in a case of superficial cancer of the face, but without any effect. In the latter case the remedy was used as a wash. To be of any service, it must, according to Lavrand, be deeply injected into the neoplastic mass, and not applied to the surface.—*Four. des Sci. Méd. de Lille*, Oct. 9, 1891.

**Boinet and Boy-Teisser on the Action of Cactus Grandiflorus on the Heart.**—The study of this agent was made in a series of trials on cold-blooded animals and upon men. The cactus extract employed was tried on turtles and frogs, and always caused a marked increase in cardiac energy. This energy was not sustained, but was reproduced with renewed dosage. After the injection of from 8 to 10 c. gms., there was cardiac relaxation and ahythmia.

The alkaloid cactine injected in quantities of from 1 to 10 m. gms. caused a permanent increase in contractile energy, without the subsequent relaxation and ahythmia.

In clinical experience they showed that the remedy could be employed as a heart tonic in large doses often repeated. There

are no cumulative effects. It has been employed in valvular lesions, myocarditis, and various secondary and functional cardiopathies.—*La Tribune Médicale*, Oct. 22, 1891.

**Villard and Vincent on Mixed Infection by the Typhoid Bacillus and the Streptococcus.**—The simultaneous infection of the organism by these two germs frequently occurs and plays an important factor in the causation of death in typhoid. Of 16 autopsies, this association was determined to exist in 5; the germs being found in the mesenteric glands, liver, spleen, blood, and nervous system.

The examples of this mixed infection naturally fall into two groups. In one, the streptococcus supervenes in the course of the disease and upon an organism already dominated by the typhoid poison. In the other, the microbic association is developed from the start. The first group comprises the greater number of cases. An angina, an otitis, an erysipelas, have all been the first local manifestation of the presence of the streptococcus. The system, already weakened by the typhoid invasion, becomes impotent to destroy, by phagocytosis, the harmful streptococcus, and to prevent the development in the system of what are really primary local cultures of the germ. Therefrom comes the danger of a general invasion with the recrudescence of all the constitutional symptoms.

In the second set of cases, the association of germs appears to exist from the start of the disease, and there results a sort of strepto-typhoid, the prognosis in which is very grave, and the effects of which very largely expend themselves upon the nervous system. This form of infection can determine the existence of typhoid fever without its classical intestinal lesions. The bacteriological examination reveals the presence of the typhoid bacillus in all the viscera and in the nervous system. At the same time the streptococci are found in large numbers in the spleen and brain.—*La France Médicale*, Nov. 20, 1891.

**Hayem on Changes in the Chemistry of the Stomach in Chlorosis.**—Examinations with reference to this point were made in 72 cases—5 men and 67 women. An excess of peptic power was found in 36, hyperacidity in 6, deficiency in pepsin in 28, and a normal condition in 2. These facts show the frequency of dyspepsia in chlorosis, and this frequency

appears to be due to the intemperate use of exciting foods and medicines—such as iron, arsenic, etc., which are so frequently and liberally given in cases of chlorosis.

The dyspepsia of adolescence is just as frequent among boys as among girls, but the latter appear to offer the more favorable conditions for the development of chlorosis. When once the latter is developed, the dyspepsia is aggravated, the more so because a wrong plan of treatment is often persisted in. This aggravation of the dyspepsia forms a great obstacle to cure and often before attacking the anæmia it is advisable to treat the case as one of simple dyspepsia.—*Le Courrier Médical*, Nov. 14, 1891.

**Bontems on Ozonized Air in Tuberculosis and Anæmia.**—The author has applied this treatment by having patients inhale ozonized air (one tenth of a milligramme of ozone to the litre of air), obtained by the aid of an electric discharge in a tube of air. Deductions from its employment in a dozen cases are:

1. In the dose employed, it is absolutely harmless.

2. It possesses a constant curative action on tuberculosis, chloro-anæmia, and in all chronic affections and cachexias.

3. It increases in almost a mathematical ratio the oxyhæmoglobin of the blood, causing at the same time an increase in vital energy, increase of weight, and an improvement in general nutrition.

4. It acts in tuberculosis as a powerful germicide both in destroying the bacillus and in so modifying the soil that it becomes an unfavorable one for the development of the micro-organism.—*Marseille Médicale*, Nov. 15, 1891.

**Verneuil on Gangrene from Injections of Antipyrine.**—The author has seen two cases in which injections made in the foot were followed by gangrene. The first patient was a man aged 39, of perfect health, who had a traumatic neuritis affecting the left foot. The pains affected the toes especially, and it was decided to give an injection of antipyrine for their relief. This was followed by gangrene of the toes while the pains were not relieved. The detached parts finally came away though a condition of profound systemic prostration was occasioned. In a second case, an injection of antipyrine at the level of the great toe was followed by the appearance of a patch of gangrene. More-



over, gangrene showed itself in a symmetrical patch on the other foot, though no injection was made on that side.

Dujardin-Beaumetz, in commenting on these cases, thinks that any other substance

would have had the same effect as anti-pyrine, and that the accident is liable to happen from any solution when the tissue nutrition is at fault.—*L'Union Médicale*, Nov. 10, 1891.

## REPORT ON RHINOLOGY AND LARYNGOLOGY.

BY H. HOYLE BUTTS, M.D.

**Gulland (G. Lovell) on the Function of the Tonsils.**—The author, in view of the numerous erroneous descriptions of the anatomy of the tonsils, briefly recapitulates their structure, before considering their function. He states that "the essentials to a tonsil are : a fold, ingrowth, or invagination of epithelium whose lumen is still continuous with that of the alimentary canal, and, surrounding this epithelial pit, a mass of adenoid tissue, whose presence may or may not cause a projection on the free surface. This tissue consists of a supporting framework of connective tissue, carrying numerous blood-vessels and lymphatics ; in the meshes of this framework lie leucocytes in various stages of development. At some points the arrangement of connective tissue and blood-vessels may be so altered as to give rise to those structures which in this country are generally known as follicles"; but which, as they have no relation to glandular follicles, it would be better to call "germ-centres," as Flemming has proposed to do. The epithelium of the tonsils is of the stratified, squamous variety, such as is found in the surrounding parts of the mouth and pharynx, excepting in the upper and anterior portion of the pharyngeal region, where it is usually ciliated. The tonsillar epithelium, however, presents a marked difference to that around it, inasmuch as its continuity is broken by the emigration of enormous numbers of leucocytes. These are produced in the adenoid tissue beneath, wander between the individual epithelial cells, or through channels found by the previous passage of leucocytes in the destroyed epithelium, enter the lumen of the crypt, and so pass on into the cavity of the pharynx and mouth. The connective tissue of the tonsils consists of a network of fine fibres, interlacing in every direction, so as to produce the very fine meshes in which the leucocytes are detained. The arteries do not penetrate far into the tonsil, but soon

break up into capillaries of unusual length. The veins are very numerous, of large calibre and have very thin walls, conditions specially favorable for the emigration of leucocytes. The lymphatic vessels commence in the tonsils by open radicles in the connective-tissue spaces. The lymphatics unite into several large trunks just as they leave the tonsil, and are crowded with leucocytes. There are no lymphatics passing to the tonsil.

The conclusions of the author, as regards the function of the tonsils, are here given in full :

1. The tonsils—faucial, lingual, and pharyngeal—are organs arranged to further the reproduction of leucocytes.

2. This reproduction takes place, mainly in the germ-centres, by mitotic division of pre-existing leucocytes.

3. The young leucocytes so formed are partly carried off to the general circulation by lymphatic vessels originating in the tonsil, partly remain in the tonsil as "stationary" cells, and partly wander out into the crypts by perforating the epithelium.

4. They thence pass to the surface of the tonsils, and take up foreign bodies, especially micro-organisms, which would otherwise pass the tonsils.

5. In the human subject the lingual and faucial tonsils, and the slight diffuse leucocyte infiltration of the under surface of the velum palati, form a protective ring or zone between the mouth, which abounds in microbes, and the rest of the *alimentary* tract ; while the pharyngeal and tubal tonsils, and the diffuse leucocyte infiltration of the upper surface of the palate, form a protective ring round the upper part of the *respiratory* tract.

6. There is no reason to regard the tonsils as having any absorbent function in normal circumstances ; the reproduction of leucocytes is sufficiently active, as a rule, to keep up a continuous outward stream of these cells, and to prevent

the entry of foreign substances into the tonsils.

7. Under certain circumstances—for instance, in general debility—the reproduction of leucocytes may be interfered with, and the outward stream of these cells from the tonsils may be arrested. This arrest or other circumstances interfering with the activity of the leucocytes may allow pathogenic organisms from the mouth, etc., to enter the tonsil by the spaces in the epithelium, and these microbes may give rise to a local or general infective process.—*Edinburgh Med. Journal*, Nov., 1891.

**Knight (Charles H.) on the Treatment of Hypertrophied Tonsils.**—It is stated as a generally accepted fact that all hypertrophied tonsils should be reduced or removed, even in the absence of marked subjective symptoms, since they are incapable of performing their function, and are only useless appendages. Also, that the size of an enlarged tonsil cannot be used as a gauge to the amount of disturbance it may cause, but that the relative dimensions of the faucial space and individual temperament of the patient must be considered instead. Moreover, that the presence of these hypertrophied organs invites contagion, and in case of infection becomes a serious complication. The author is sceptical in regard to the influence of internal medication on these hypertrophies, except, perhaps, in cases of struma or anæmia; likewise as to the use of local applications for the purpose of promoting absorption. He believes that the constitutional defects present in these cases are, in the majority, due to the presence of the hypertrophied tonsils, and are best remedied by their complete removal. An enumeration of the different methods employed for their reduction and removal is given. Electrolysis, massage, and the chemical caustics are considered, at their best, to be slow, and the latter are difficult of limitation in their application. Avulsion with forceps and ligation are mentioned merely as a matter of history. Enucleation by means of the finger has occasionally been practised, but has nothing to commend it. The cold wire snare is extremely painful, the tightening of the loop difficult, and the after effect distressing. Galvano-cautery puncture is specially adapted to the destruction of broad, flat, adherent, and deeply embedded tonsils. The galvano-cautery snare or amygdalatome will be

found serviceable in the protuberant tonsil of the adult who refuses to be cut, or when a hæmorrhagic diathesis is suspected. Excision, in the large majority of cases, is undoubtedly the most advantageous way of removing hypertrophied tonsils. This is best accomplished by means of the MacKenzie guillotine. If possible, the whole organ should be removed. As regards hæmorrhage, the author is convinced that the danger from this source has been grossly exaggerated and that in selecting cases for excision, it is not the vascular-looking tonsil that offers a prospect of alarming bleeding, but the pale, fibrous one of the adult or of advanced childhood. General anæsthesia in its primary stage is advocated for operations on children, the tonsils being rapidly extirpated and the patient turned face downward at once, to prevent any chance of asphyxiation. The anæsthesia not only obviates all suffering, but enables the operator to explore the naso-pharynx, and remove any of the lymphoid hypertrophies so frequently found associated with enlarged faucial tonsils.—*Journal of the American Med. Ass.*, Oct. 10, 1891.

**Bosworth (F. H.) on the Various Forms of Disease of the Ethmoid Cells.**—The author reports twenty-seven cases of this condition occurring in his practice during the past six years, and enters a plea for a more definite diagnosis than is embodied in the usual one of "ethmoidal disease." The classification suggested by this experience is as follows: *First*, myxomatous degeneration without purulent discharge. *Second*, group characterized by extracellular myxomatous degeneration with purulent discharge from ethmoid cells. *Third* variety that of "purulent ethmoiditis with nasal polypi." The *fourth* is designated as "intracellular polypi without pus discharge," and the *fifth*, as "intracellular polyp with purulent discharge." Thirteen of the cases recorded were of the purulent variety, with nasal polypi, and of these, seven were complicated by disease of the autrum. Dr. Bosworth emphasizes his belief that the ethmoiditis is the result of the nasal polypi causing mechanical obstruction to the flow of normal mucous secretion, thus developing a purulent inflammation. He takes exception to Woakes' theory that all nasal polypi are due to a necrosing ethmoiditis, but has no suggestion to offer regarding

their origin. In diagnosing the intracellular variety of myxomatous degeneration, this can only be done after opening the cells, by removing the cap of the middle turbinated body. The treatment followed out has been that of freely opening the ethmoidal cells, preferably by means of the snare and removing the diseased tissue with the small spoon-shaped curette, burr, or drill.—*New York Med. Jour.*, Nov. 7, 1891.

**Casselberry (W. E.) on the Radical Treatment of Nasal Polypi.**—A vigorous surgical treatment is advocated, having for its object, first, access to and then eradication of the actual seat of attachment. Zuckerkandl's researches on cadavers are quoted, by which it is shown that two thirds of all nasal myxomata originate from the middle meatus, beneath the middle turbinated body, and that two thirds of this number spring from the edges of the hiatus semilunaris, which is an opening into the infundibular space, whose upward and downward continuations enter respectively the frontal and maxillary sinuses. Any deformity in the region of the middle meatus, causing pressure, is considered a potent factor in the production of myxomata, as it impairs the venous escape which results in an oedematous condition of the membrane. True vaso-motor paresis, by favoring an oedematous transudation, exerts a like effect. After removing the polyps by means of the snare, their points of attachment should be subjected to a circumscribed but deep cauterization with the electro-cautery. By this method the majority of cases will be permanently cured, but a minority will always remain in which the condition reappears. The treatment for the recurring myxomata is that of removal of the antero-inferior part of the middle turbinated body which permits cauterization of the parts, previously difficult of access, provides free drainage, and relieves the oedema caused by pressure. The author prefers a properly constructed turbinate-bone scissors for the abscision, when the space is sufficient to admit them far enough up on each side of the body. He thinks there is less danger of fracturing the bone higher up than intended, than with the snare. Also that there is some liability of the loop of the latter slipping. Again there are times when neither of these instruments are applicable on account of the extremely limited space, and then sharp,

strong cutting forceps are required and the part removed in fragments.—*New York Med. Jour.*, Nov. 14, 1891.

**Whiting (Fred.) on the Treatment of Hypertrophied Turbinated Bones by Flap Operation.**—In hypertrophic obstructions of the nose, the middle more frequently than the inferior turbinated is the affected part. The removal of the entire bone by means of the snare, etc., has never appeared advisable, but the grooving of it on the lower side, leaving the mucous covering intact, and folding this, scroll-like, around the remaining portion of the bone, has been found to give ample space. The mucous membrane having been cocaineized, the electric trephine is introduced and applied to that portion of the bone lying most prominent anteriorly, in such a manner as to leave the membrane overlying the inner aspect of the bone, and in contact with the septum, intact. The trephine is now carried through the lower edge of the bone, backward and downward towards its posterior extremity, removing the most dependent point of mucous membrane, and with it a thin shell of bone. This manoeuvre is repeated until the bone has been cut away from below upward to a point a little above its broadest portion, or that part which impinged most closely on the septum. There now remains but a part of the original bone, attached to which is the mucous membrane formerly covering the whole of it, minus the small amount cut away in the groove; when the bleeding has ceased this flap can easily be folded about the cut surface, and is held in place by a small plug of cotton, well smeared with vaseline. The advantages alleged for the operation are: That the minimum amount of traumatism is inflicted upon the nose. That in consequence of the use of a flap, union by first intention is obtained, and the formation of dense masses of scar tissue avoided. That by this method there is complete preservation of the mucous membrane.—*New York Med. Jour.*, Dec. 12, 1891.

**Wagner (Clinton) Reports a Successful Thyrotomy on a Child Eighteen Months of Age.**—This, he believes, to be the youngest patient of which we have record. The operation was performed to relieve stenosis of the larynx caused by a papilloma of the left vocal cord. The growth was about the size of a pea.—*New York Med. Jour.*, Nov. 7, 1891.

**Williams (P. Watson) on Tuberculin in Laryngeal Tuberculosis.**—A report of four cases in which this treatment was used. It was found to have a more lasting sedative effect than morphia in relieving the odynphagia, but this was apparently the limit of its usefulness.—*Provincial Med. Jour.*, Nov. 2, 1891.

**Black (G. Melville) on Hypertrophy of Luschka's Tonsil, or Adenoid Growths in the Pharyngeal Vault.**—A description of this common disease is given, and the importance of its early recognition and surgical treatment impressed upon the mind of the family physician. The author states that at least fifty per cent. of these cases have associated with them some condition of middle-ear disturbance, ranging from a simple catarrhal inflammation to that of chronic suppuration. Also that a favorable prognosis may be given in a majority of these, so far as the hearing and minor symptoms are concerned, providing they are not of too long standing, and that irreparable damage has not already been done. The Gräde forceps are preferred as a means of removing these growths, and general anæsthesia employed.—*Denver Medical Times*, Oct., 1891.

**Parker (Francis L.) on Report of Four Cases of Cackle-Burs in the**

**Larynx.**—On account of their numerous sharp projections, these bodies present considerable difficulty in removal, even when seen with the laryngoscope. In only one of these instances was operation (tracheotomy) deemed necessary. The other three burs were expelled in the course of a few days.—*Med. Record*, Nov. 28, 1891.

**Bosworth (F. H.) on Subglottic Laryngitis or Catarrhal Croup, as One of the Manifestations of Lymphatism.**—Four cases recently under observation have suggested to the mind of the author that a large majority, if not all cases, of what are usually designated as subglottic laryngitis are really the result of hypertrophic changes in the lymphatic structure, situated in the mucous membrane of the subglottic portion of the larynx. Therefore it is deemed advisable in attacks of catarrhal croup in young children to administer the iodide of iron for the correction of the probable lymphatic dyscrasia, especially if there exists other evidence of lymphatism, such as hypertrophied faucial or pharyngeal tonsils. The dose of the official syrup for a child five years of age should be half a drachm three times a day, and during acute attacks ten drops every hour.—*Med. Record*, Dec. 19, 1891.

## REPORT ON SURGERY.

BY GERTRUDE KELLY, M.D.

**Owen (Edmund, F.R.C.S.) on the Surgical Treatment of Tuberculous Cervical Glands.** (*Practitioner*, November, 1891).—Considerable time is usually wasted with iodine, poultices, and trips to the seaside. When a gland has once broken down an operation of some kind is inevitable. Too often nature is allowed to be the operator. The reason that glandular abscesses in the neck are so often allowed to run their prolonged and unsatisfactory course is the practitioner's dread of alarming the parents by proposing an operation which will demand the administration of chloroform, the infliction of a wound, and the methodical scraping of deeply lying parts. Further, he knows that there must result a permanent scar; but experience shows beyond a doubt that the scar left by a clean and thorough operation is much less conspicuous than that which

follows the plan of "leaving things to nature," or of adopting a half-hearted policy.

If the glandular affection is not far advanced the operation may be extremely simple. The surface of the neck is rendered aseptic, chloroform administered, the dusky and unhealthy skin cut away, and the gland capsule thoroughly scraped out with a sharp spoon. There are no sinuses to be laid open, or neighboring compromised glands to be weeded out. The wound is therefore vigorously swabbed with a little mercuric wool and dusted with boracic acid, a strip of protection is laid over the opening (to prevent the dressing sticking), the neck is firmly bandaged over absorbent dressings, and the head laid flat and steady between two large sand-pillows. The cavity fills up by granulations; these are in due course con-

verted into pink and then white scar-tissue, which, undergoing inevitable contraction, eventually leaves the child with a scar so small as to be scarcely noticeable. But, unfortunately, only a small percentage of cases are of this simple character. They have been allowed to drift on till some effectual operation is clearly inevitable. It is of little use advising operation in a case unless the surgeon is determined to deal radically with every implicated gland and sinus. He must secure a skilled assistant, as well as a skilled anæsthetist. In giving chloroform it is always necessary to watch the pulse as well as the respiration. It is more than possible that the sudden syncope of two children during this operation may have been owing to the serious disturbances to which the larger vessels and nerves beneath the base of the skull were necessarily subjected during the removal by enucleation or scraping of adherent masses of gland. In a deep and extensive operation in the neck there is no structure which gives the surgeon so much anxiety as the internal jugular vein. In most cases some enlarged gland is found lying close against it, and in not a few cases the capsule is intimately adherent to it. Sometimes, on the conclusion of an operation, upwards of an inch of the naked vein may be seen in the depths of the wound. In one of my recent operations, on gently drawing a hard mass of gland toward the surface, we found that the vein was being dragged up with it, and running the greatest risk of injury. It is quite extraordinary to note the number and importance of structures which are often laid bare in the depths of the wound,—muscles, vessels, and nerves. But the internal jugular vein is the only one which causes real anxiety—it is thin-walled and easily lacerated, deriving almost no protection from a sheath. On one occasion, the diseased gland was so adherent to the vein that a wound of the vessel was unavoidable. Two ligatures were applied, and the vein divided between them.

In attempting to isolate the internal jugular vein preparatory to ligature, the close proximity of the vagus, the sympathetic, and other nerves must be remembered, as also that of the internal carotid artery. Blindly to thrust down the catch forceps in the region from which dark blood is welling up with alarming rapidity would be rash and unsurgical. The hemor-

rhage must be provisionally controlled by prompt and firm pressure beneath the mastoid process, and then the vessel must be thoroughly exposed, the sterno-mastoid being cut across if need be. It is highly expedient, therefore, that the surgeon be not destitute of competent assistance; he must not depend for help upon the anæsthetist, for that individual may find that he has already quite as much as he can manage with safety.

If a considerable amount of diseased skin has had to be cut away, or if a layer of friable tuberculous cicatrix has needed removal by the sharp spoon, no attempt should be made to close the wound. A clear course having been made by the sharp spoon down to the depths of the diseased area, drainage will take place without special provision being made for it. But if there has been only a slight sacrifice of skin, and the surgeon thinks himself justified in attempting to secure primary union, it is better to leave in a slender piece of drainage tube, or a small strand of horse-hair. There is sure to be considerable exudation following the scraping, and unless the fluid escapes freely into the dressings, it is apt to cause tension, pain, and disappointment. A scraping operation is very different from a clean incision through healthy tissues, and often there is a considerable amount of discharge for a week or more.

When a new operation is introduced, it takes some time to settle down to its true value and proper place. Too much is expected of it. Too much is promised for it. The last note, therefore, in connection with the radical treatment of tuberculous glands is one of caution. It is in every respect a most excellent operation. In some cases its success proves greater than could have been expected, but in others it proves, in the first attempt, somewhat disappointing. Experience has not yet indicated exactly what class of cases are likely to need a second clearing, but it has abundantly shown that the chief element in begetting disappointment is delay in subjecting the child to the ordeal. Another element is the paving of the way to the operation with solid promises of immediate and complete relief. The wise surgeon promises no more than he can assuredly perform, and, following the advice of a mighty statesman, he never prophesies unless he knows.

**Freeland (J. T.) on Œsophagotomy for the Removal of a Silver Dollar** (*N. Y. Med. Record*, Oct. 24, 1891).—While scuffling with some companions, a young man, holding a silver dollar in his mouth, accidentally swallowed it. It lodged in the œsophagus about an inch above the sterno-clavicular articulation. When seen two hours after the accident, he was in intense pain, and making constant violent efforts at vomiting. The coin could not be reached with forceps nor with an improvised coin-catcher. The patient was anesthetized, the head drawn back and to the right, making tense the muscles and fascia on the left side of the neck, and an incision three inches in length made along the anterior border of the sterno-mastoid muscle. The tissues were carefully divided with the blade and handle of the scalpel, until the blood-vessels came into view. These were drawn to one side, and the trachea to the other, and the incision continued until the coin could be felt through the wall of the œsophagus, which bulged into the wound. An incision was made down on the edge of the dollar, and as soon as it could be seen it was grasped with a forceps and the opening enlarged, until the coin could be drawn out. The only hemorrhage was from a small artery near the œsophagus, which was secured without difficulty. No sutures were taken in the œsophagus, and the wound was packed with iodoform gauze, which was afterward changed daily. The inferior laryngeal nerve was divided. On the ninth day the patient was able to swallow fluid while lying on his right side, on the fifteenth day could swallow in the upright position, and on the twenty-fifth day he returned to his ordinary diet.

**Merz (Charles) on Trephining for Traumatic Epilepsy** (*Med. Age*, Nov. 25, 1891).—When eight years old, patient, who is now eighteen, was kicked on the back of the head by a horse. He became unconscious from the blow, and lay in a comatose condition for ten days. Unfortunately his particular symptoms at that time cannot be given now. His parents state that upon gradually emerging from stupor, he could not make use of any words, and when finally he could, he stuttered badly and used wrong words. There were some facial and bronchial (?) paralysis. The wound discharged pus copiously for

four weeks, and then healed up. The physicians in attendance were divided in their opinions. One recommended trephining, and two opposed it; so that he was allowed to recover with a depressed fracture of the skull. As he grew older, it was noticed that he was becoming dull and apathetic, was inclined to sleep a great deal, and frequently dozed while in conversation with playmates. He was given to frequent and violent outbursts of temper. His memory became poor. About a year ago, while at work, he suddenly fell unconscious, and lay in that condition for eight or ten minutes. His face became livid, and his arms and legs twitched violently and convulsively. He frothed at the mouth. Of this attack he had no warning. However, his epileptic seizures became more and more frequent, and he had distinct aura. Family history was negative. On examination, a distinct depression in the skull,  $2\frac{1}{2}$  inches long and  $\frac{1}{4}$  of an inch wide, was found near the superior angle of the parietal bone. On operation, a one-inch trephine was applied at the posterior margin of the depression, and a disk of bone removed. The inner surface of the disk showed a ridge corresponding to the line of the old fracture. The disk was adherent and had to be dissected from the dura mater. Cerebral pulsation was normal. The dura was thickened, and dark in color. A sharp spicula of bone was found projecting into the dura. A second button was removed, about  $\frac{1}{2}$  of an inch anterior to the first, and was also found to be adherent. The intervening piece was removed by means of the saw and rongeur forceps. The edges of bone were smoothed and all projecting points rounded with the bone-forceps. Hemorrhage from the dura and bone was quite free. A small drainage tube was inserted, the flap replaced and stitched with catgut, and the wound dressed with iodoform. The operation consumed about one hour and a half. The dressing was not changed until the fourth day, when the wound was found perfectly united, except at the point where the tube emerged. Eight weeks after the operation, had had no pain nor any symptoms of an epileptic seizure.

**Martin (Edward) on Wounds of the Femoral Vein** (*Univ. Med. Mag.*, Nov., 1891).—H. Braun has definitely and conclusively proved, in so far as they can be shown by vivisection, the mechanism

by which circulation is restored after ligation of the common femoral vein. His experiment was as follows: Having inserted a canula into the common femoral vein of a dog, he passed a rubber tube around the lower limb beneath the femoral artery and vein. On tightening the tube all return blood, except that passing through the vein, was stopped. The pressure immediately rose, reaching the same point as that observed in the artery. This showed conclusively that the femoral vein was not the only channel by which the blood of the leg reached the general circulation. He next proceeded to experiment upon the legs of human cadavera. By a pressure of from 10 to 20 mm. of mercury, he readily succeeded, in a certain number of cases, in forcing injections into the veins of the pelvis after ligation of the femoral vein just below Poupart's ligament. In one instance, where the lymphatic glands were infiltrated, this experiment succeeded with very slight pressure. A number of cases required a pressure of from 15 to 120 mm. In a certain number even a pressure of 300 mm., continued for an hour, was absolutely insufficient to overcome the resistance of the femoral valve. Braun states, in conclusion, that though the valves do offer a mechanical obstruction to anastomosis, after ligation of the common femoral, their obstruction is overcome in 85 per cent. of all cases by a pressure not exceeding 120 mm of mercury. In 15 per cent. a much higher pressure is absolutely unavailing, after ligation of the vein below Poupart's ligament, the valves absolutely preventing any entrance of liquid from the leg to the pelvis. Of course these experimental results are more unfavorable than would be the case in the living body, since the pressure is long-continued and the vessels have not lost their elasticity. As a result of these experiments it would seem that there is great difference in the ease with which collateral circulation is established in different cases. In some instances this takes place so readily that obliteration of either vein or artery, or both vessels, is followed by no evil consequences; in other cases their collateral circulation is established only as a result of greatly increased pressure; hence a stoppage of arterial circulation cuts off the very means by which blood stasis is prevented. In the third class of cases it would seem that by no amount of pressure can a collateral circu-

lation be established. Here ligation of a femoral vein must necessarily result disastrously. Hence, idiosyncrasy plays a most important part in the prognosis of ligation of the femoral vein, and there are absolutely no means of determining in a given case whether or not the resistance of the valves can be overcome. Where a morbid process, such as adenitis or malignant disease has gradually and progressively compressed the femoral vein, there has been abundant time allowed for the dilatation of collateral venous branches, and the consequent overcoming of valvular resistance. When the return blood-current is suddenly cut off, however, without previous preparatory dilatation of the anastomotic branches, and particularly when the tissues of the upper third of the thigh are infiltrated with blood and densely congested, as the result of inflammation, such as frequently occurs after gunshot wounds, there is reason for grave doubt as to the possibility of the collateral branches restoring circulation. Since there is no possible way of ascertaining beforehand whether or not the valves will remain competent, it is self-evident that circular ligation of the common femoral vein is indicated only in cases of tumors which have caused collateral circulation to be partially established, and in cases of wounds where other means have failed.

From what has been said it can be seen that any method which accomplishes the preservation of the vein lumen, the checking of hemorrhage, and the closure of the wound, merits careful attention. The easiest and oldest method of accomplishing this, if the wound be small, is lateral ligation. The objections urged against lateral ligation are that it is liable to be followed by consecutive or secondary hemorrhage, from slipping of the cord or from sloughing, and that it forms a thrombus almost as readily as, and emboli far more surely than, the complete circular ligation. Since the advent of cleanliness in surgical operations, septic thrombi and emboli are no longer to be feared, so that the danger of primary or consecutive bleeding from slipping of the ligation is alone to be provided against. The smooth, thin, elastic vein walls, which, if bagged and knotted, exert constant tension upon the ligated portion of the lumen, at times defy the efforts of the surgeon to secure them firmly. The finest silk compatible with strength should be employed. The margin of the wound should be picked



up with hemostatic forceps, and the knot should be drawn very firmly. This brings intima to intima, and union usually takes place promptly, clotting never being found. A wound of one third the circumference of the vessel can be safely closed in this way, and where suppuration does not take place the surgeon can rest assured that the circulation of the blood through the involved part of the vein still continues. Other methods of lateral closure of vein-wounds can be attempted where the case does not seem suited for lateral ligation. The application of hemostatic forceps has not a few successes to its credit, and suture has more recently given good results. Where the vein-wound is beyond a third of an inch in extent two of the small hemostatic forceps will probably be required, though even much larger wounds than this passing in the long axis of the vessel may be clamped and held in a pair of the larger-pressure forceps used in intra-abdominal work. (In both this method and that of the suture the surgeon must take the utmost pains to bring intima to intima; union should be secured by direct adhesion and subsequent organization of the smallest possible amount of lymph between the vessel walls.) In some cases six hours have been deemed a sufficient time for adhesion to form strong enough to resist the slight venous pressure. Some operators have left the forceps in place from four to six days; 24 hours' pressure is probably sufficient, since it is found that arteries as large as the facial may be left without ligation after an application of hemostats lasting no

longer than the time required for certain tedious tumor operations about the face and neck, although here there is high pressure with pulsation. Three days is the extreme limit of time during which they can be of service, as after this they simply cling to necrotic tissues, and act as a foreign body in the wound. Shede operated upon a patient, aged fifty-seven, for the extirpation of inguinal glands which had undergone malignant degeneration. When about to complete the operation, he accidentally opened with his scissors the femoral vein, just below the entrance of the saphena. He immediately stopped the bleeding by pressure, applied an Esmarch's tube to the thigh and groin, and proceeded to suture the vein opening by means of a very small needle and the finest catgut that could be obtained. The ordinary suture was applied, bringing to a slight extent intima to intima, and as a further security the sheath of the vessel was then sewed together over the first line of suture. No circulatory disturbance followed, the wound healing by primary intention. Free bleeding sometimes takes place when the needle drawing the thread behind it is passed through the vein-wall. This complication may be entirely obviated by using a double catgut thread.

By whatever method lateral closure of vein-wounds has been secured, careful pressure is a valuable adjunct in the treatment. Where suture, or where bagging by lateral ligation has been resorted to, the wound, if sterile, should be closed, the thigh should be flexed, and a compress and a pressure bandage should be applied.

## REPORT ON THERAPEUTICS.

**White (J. H.) on the Use of the Hypophosphites.**—All of these salts have one effect in common: they increase blood pressure and give vigorous circulation and consequent warmth to the extremities, and this has a tendency to equalize the general circulation and relieve stases and engorgements, and thus lower temperature and re-establish the functions of mucous membranes, skin, and kidneys. This is a large step toward the end in view—the attainment of a normal condition of all the bodily functions or health. But it must be remembered, that when it is desirable to relieve certain states of given tissue, the salt containing the element which affects

those tissues must be selected and properly administered.

There is one more ground in common with all of the alkaline hypophosphites that we must not overlook, and that is their tendency to defibrinize the blood. The stomach has the power of analysis; it separates the elements of these salts and gives them to the tissues separately. So we must see to it that alkaline salts are used *only when the system requires them*; not carelessly and indiscriminately, for if we use an alkali when the blood is already too strongly alkaline we will only add complication to difficulty, and fail in our treatment. These alkaline salts are appropriate

only when the blood has too great a proportion of the fibrin factors and is tending toward fibrinous deposits of some character, or precipitating the alkaline salts in the system. So it is to be hoped, that the venders of proprietary remedies containing these salts, all jumbled together in an indiscriminate mass and manner, will soon awaken to a full realization of the facts herein set forth, and begin to prepare their syrups of these salts separately so that they can be administered rationally by rational practitioners.—*Am. Med. Four.*, Nov., 1891.

**Y von and Berlioz on Benzonaphthol, a New Intestinal Antiseptic.**—The composition of  $\beta$ -naphthol with salicylic acid, known as salicylate of naphthol, or betol, has been used in medicine for some time, but its composition is not constant, and it does not meet all the therapeutic requirements of the cases in which it is employed. In certain cases where renal disease exists, the kidneys are injuriously affected by the elimination of the salicylic acid due to the breaking up in the system of the salicylate

Benzoic acid is, however, free from these objections and the combination of this acid with  $\beta$ -naphthol is known as benzonaphthol. Its formula is  $C_{10}H_7O(C_7H_5O)$ .

Benzonaphthol when introduced into the alimentary canal breaks up into  $\beta$ -naphthol, which remains in the intestine, and benzoic acid, which is eliminated in the urine in combination with alkaline bases; a greater or less portion is also transformed into alkaline hippurates.

The experience of the writers justifies them (they think) in concluding as follows concerning the new remedy.

1. It is very slightly toxic.
2. Its antiseptic power is comparable with that of the other substances employed in promoting intestinal antiseptis.
3. It promotes diuresis, and diminishes the toxicity of the urine.
4. The portion of it which is absorbed is easily and rapidly eliminated by the kidneys.
5. The dosage may be rapidly raised for adults to 5 grammes (75 grains) a day, and for children to 2 grammes (30 grains) a day. It should be given in small quantities frequently repeated. A dose of about 25 to 50 centigrammes (4 to 8 grains) in wafer-paper, or suspended in a convenient vehicle (syrup and water, for example),

suffices in the majority of cases.—*Practitioner*, Dec., 1891.

**Sailer (J.) on the Physiological Action of Ouabain.** As a result of a series of elaborate studies, the writer summarizes the action of ouabain upon the neuro-muscular system as follows:

1. That it diminishes and finally abolishes reflex action by paralysis of the peripheral sensory nerves, and this paralysis then extends to the sensory nerve-trunk.
2. That it paralyzes the striated muscles by direct action upon their tissue.
3. That it paralyzes the motor nerves only when the action in the body is very prolonged or when a strong solution is applied directly to the nerve.
4. There does not appear to be any action upon the central nervous system.—*Therap. Gazette*, Dec. 15, 1891.

**Russell (H. E.) on Avena Sativa.**—*Avena sativa* should always be given in appreciable doses of the tincture. Fifteen drops three or four times a day, well diluted, will usually meet the case. It may be given in doses of from fifty to sixty drops in rare instances. It should, however, never be given in larger quantities than twenty minims unless the patient is thoroughly accustomed to the remedy, and has found the usual dose insufficient. Otherwise there is danger of getting the physiological effect of the drug, which is *pain at the base of the brain*. When this symptom makes its appearance the medicine should be discontinued for a day or two, and then given in reduced doses. The drug is pre-eminently an antineurotic, quieting the nervous system to a remarkable degree. Its special sphere of action seems to be upon the male sexual organs, regulating the functional irregularities of these parts perhaps as much as any drug can. It is a most useful remedy in all cases of nervous exhaustion, general debility, nervous palpitation of the heart, insomnia, inability to keep the mind fixed upon any one subject, etc., more especially when any or all of these troubles are apparently due to nocturnal emissions, masturbation, over-sexual-intercourse, and the like. For these disorders it is truly specific. It is one of most valuable means for overcoming the bad effects of the morphine habit.—*Hahnemann Month.*, Dec., 1891.

**Murrell (W.) on Guaiac as a Purge.**—My attention was drawn to the subject some two years ago by casually

prescribing for a city man suffering from rheumatism some guaiacum lozenges made up with black-currant paste. He continued taking them long after the pains had ceased, and his explanation was that they did him good by acting on the liver and bowels. He said that one or two of the lozenges taken in the morning before breakfast acted promptly and without inconvenience. I ordered the lozenges for other of my patients suffering from constipation, and what is conventionally called "biliousness," and the result was equally satisfactory. The lozenges not being available for hospital use, I had a confection prepared containing ten grains of guaiac-resin to a drachm of honey. This was curiously popular with the patients, and for the last two years I have used it extensively, not only as a purgative, but in the treatment of chronic rheumatism, sciatica, tonsillitis, dysmenorrhœa, and allied affections. The confection is nasty, but is appreciated by patients. At first I gave it in drachm doses once a day, but they were not satisfied with this, and I had to increase the dose to two drachms three times a day.

In one case it produced a well-marked rash, covering the arms and legs with an eruption which forcibly reminded one of copaiba. It was accompanied by intense itching, which disappeared on discontinuing the drug. The guaiacum not infrequently gives rise to a burning sensation in the throat, and to obviate this I prescribed the ten grains of the resin in one half ounce of extract of malt, which answered admirably. *Phil. Med. Bulletin*, Dec., 1891.

**Corning (J. L.) on the Localization of Remedies about the Sensory Nerves of the Skin.**—The author has devised a method of inducing protracted local anæsthesia without mechanical aids. His procedure embodies the following principles:

1. Injection of the medicinal solution (anæsthetic) into the skin.
2. Subsequent injection through the same hypodermic needle, and without its removal from the part, of a non-irritant oil.
3. Precipitation of this oil, after its injection into the skin, by the aid of moderate cold, *but without freezing the tissues* (ether spray).
4. Taking up the slack of the skin near the seat of injection.

The technique involved in the practical application of these principles may be thus described:

In the first place, we inject an aqueous solution of the anæsthetic ( $C_{17}H_{31}NO_4$ , HCl) into that portion of the skin which we desire to render insensible. Then, without removing the hypodermic needle, we immediately inject a considerable quantity of the oil of theobroma, or cacao butter, as it is commonly called.

Finally, by the application of cold to the skin directly after the execution of these manœuvres, we cause the oil to solidify within the parenchyma, thus obstructing the circulation in the capillaries and causing more or less complete stasis.

To carry these manipulations into complete effect a double syringe is required, one barrel containing a two-or-three-per-cent. solution of the hydrachloride of cocaine and the other the oil of theobroma, which is maintained in a fluid state by occasionally dipping the syringe into warm water of about  $110^{\circ}$  F. The capacity of the barrel containing the anæsthetic is one hundred minims, while that destined to contain the oil will readily hold four or five hundred minims.—*New York Med. Jour.*, Dec. 26, 1891.

**Delavan (D. B.) on a New Method for the Administration of the Iodide of Potassium.**—If pepsin be added to warmed milk the result is the well-known article, "junket," "rennet custard," or "rennet curd," the pepsin acting upon the milk as a digestive, and causing it to curdle and to form a delicate, jelly-like mass, which is attractive to the eye, palatable to the taste, more easily swallowed than anything, perhaps, but an oyster, and remarkably easy of digestion and assimilation. This curd forms an admirable vehicle for the administration of the iodide, and in the proportion of ten grains of the iodide to four ounces of milk effectually disguises the taste of the salt. If a stimulant be required, a little sherry wine may be added. The iodide should be used in a saturated solution with water, one drop of which equals one grain of the drug. Any good pepsin may be employed; that which the writer has found most effective in its prompt and thorough action upon the milk, and most agreeable to the taste, is the so-called "Fairchild's essence of pepsin."

To administer a five-grain dose of the iodide, place five drops of the saturated

solution of the iodide in the bottom of a small tumbler, with fifteen drops of essence of pepsin, and, if desired, a teaspoonful of sherry; upon this pour two ounces of warm milk, and set away in a cool place. The milk must not be too hot, as otherwise the digestive properties of the pepsin will be destroyed. Coagulation soon takes place, and the mixture is then ready for use.

For the general convenience of the patient, the following formula may be dispensed :

R Potass. iodid. (sat. sol.).... 160 grs.  
Essence of pepsin.....  $\frac{3}{4}$  j.  
Sherry wine..... q. s. ad  $\frac{3}{4}$  iv.

M. Sig. : 3 j. in four tablespoonfuls of milk, according to directions.

While this method may not be necessary in many simple cases, there are, nevertheless, a very considerable number in which it may be employed, and in which it will be found to fulfil the required conditions better than any other now in use.—*N. Y. Med. Record*, Nov. 28, 1891.

**Gregg (W. H.) on the Use of Guaiacol.**—Guaiacol—monomethylcateol—is, as is well known, one of the component parts of creosote, and possesses all of the antiseptic properties of creosote and is free from many of the objections to that drug. When properly prepared, it forms a safe and potent antiseptic in the treatment of pulmonary consumption.

Its administration in an enema places it completely under the physician's control, for he is able to increase or diminish the dose to the quantity necessary to produce and maintain any degree of asepsis he may desire. I prepare the iodo-guaiacol by adding four grammes of iodine to thirty-two grammes of guaiacol (Merck's), using gentle heat if necessary. After the iodine is dissolved I add fifteen hundred grammes of pure olive oil. A fluid ounce of this mixture contains about an eighth of a grain of iodine and five grains of guaiacol, and constitutes a minimum dose for an adult. It is advisable to begin the treatment with this quantity, and gradually increase it until the full effects of the drug are produced, which may be known by its effects upon the urine and by the patient observing the peculiar taste of the guaiacol.—*N. Y. Med. Jour.*, Nov. 21, 1891.

**Bartholow (R.) on the Mydriatic Alkaloids.**—The writer's preferences for the selection of the remedy from this class in any given case are as follows :

1. For eye operations and refraction work, homatropine.

2. For eye inflammations, atropine.

3. For maladies attended with insomnia, neuralgia, nervousness, various kinds of nervous trembling (chorea, senile trembling, paralysis agitans, muscular agitation and unrest), hyoscine or hyoscyamine.

4. For mental diseases of a depressing kind, melancholia, etc., puerperal mania, with or without albuminuria, duboisine, hyoscine or hyoscyamine, but especially the first named.

5. For acute mania, paranoia, mental disorders with much muscular agitation and frequent and protracted muscular restlessness, hyoscine or duboisine.—*Phila. Med. News*, Dec. 12, 1891.

**Mullhall (J. C.) on Diet and Exercise in the Treatment of Simple Chronic Inflammation.**—The general proposition laid down is, that in many cases of nose and throat trouble the cause lies in improper food and lack of proper exercise. Local treatment is unnecessary, and may be even harmful. It will not do to give our patients general directions about diet and exercise. We must be as particular in directions about these matters as we are about our drugs. Several clinicals illustrate the points made. The whole tone of the article is most commendable.—*N. Y. Med. Record*, Dec. 26, 1891.

**Auld (J.) on Treatment of a "Bad Cold."**—The author highly extols the use of gelsemium, which he claims arrests profuse nasal secretions, quiets headache and neuralgia, subdues cough and pain, favors a re-establishment of secretions, through its influence upon the skin, kidneys, and gastro-intestinal tract. It reduces temperature and pulse-rate, promotes sleep, and creates a feeling of comfort and well-being without in any way approaching narcosis or destroying the oxygen-carrying capacity of the blood corpuscles. By the use of this single remedy, much discomfort to the patient is avoided, digestion remains undisturbed, nauseating draughts are banished, the necessity for purgatives precluded, and all dangers of subsequent relapse practically eliminated; while recovery is prompt, perfect, and satisfactory in every particular. Ten drops of a reliable fluid extract (assayed), are dissolved in three ounces of water, and of this mixture the patient takes a teaspoonful every ten or fifteen minutes for an hour, then at less

frequent intervals according to the effects produced. The plan is simple, the medicine harmless in the dosage recommended, and not at all unpalatable, and the claims for it can be verified almost any day of the week at this season of the year, by submitting the remedy to the crucial test of clinical experience.—*N. Y. Med. Record*, Nov. 28, 1891.

**Langdon (F. W.) on Treatment of La Grippe.**—Looking at the sudden onset, with rigors, fever, asthenia, catarrh, and myalgia as the evidences of a specific infection, it would seem that the main *indications* for medicinal treatment, after attention to the diet and alimentary tract, are :

- a Antiseptic.
- b Anodyne.
- c Diaphoretic.
- d Expectorant.
- e Anti-arthritis (if we may be permitted to coin a term for the sake of brevity).
- f Diuretic.

Quinine, as experience has shown is useless in the disease, which would naturally be expected on theoretical grounds, since it meets but *one* of the indications, viz.: the antiseptic.

While the coal-tar antipyretics may be considered to possess antiseptic, anodyne, and diaphoretic properties, they have little or no action as expectorants, nor do they hold in check the progress of the joint inflammations in the arthritic type of the disease.

Moreover, as already stated, serious objections to these drugs are the depression, cyanosis, and anæmia, which are apt to follow their continued use.

A remedy which has seemed to the writer to fulfil, in a high degree, *all* the indications, and to possess great clinical value,—without the drawbacks mentioned—is the *salicylate of ammonia*, made by neutralizing salicylic acid with ammonia carbonate, in the same manner as the corresponding sodium salt is prescribed in articular rheumatism, etc., *e. g.* :

- B Acid salicylic, . . . . . ʒ ss.
- Ammon. carb. q. s., ad neutr.
- Glycerine . . . . . ʒ ii.
- Aq. menth. pip. q. s. ad. . . . ʒ vi.

M. Sig.—Dose, one dessertspoonful in a wine-glassful of water every one or two hours.

—*Cincin. Lan.-Clin.*, Dec. 2, 1891.

**Edson (C. C.) on Treatment of Whooping Cough.**—The writer highly commends the use of fluid extract of castana

Americana (American chestnut), which he gives in doses of half a drachm every three hours. It can be combined with syrup of wild cherry or tolu. He has been able uniformly to relieve the acute symptoms of any stage in from six to ten days.—*Chicago Med. Times*, Dec., 1891.

**Musser (J. H.) on the Management and Climatic Treatment of Whooping Cough.**—In the opinion of the writer we practise a *laissez-faire* method in this disease. The fact is lost sight of that the malady is an auto-infectious one. The constant recurrence from time to time of aggravations of the disease, in spite of measures to prevent "cold," etc., point to reinfection. Moreover, careful study of the inflammatory process in the lung cannot fail to impress one with the mycotic origin of the inflammation. This is particularly seen in the severe cases. An area of the bronchi is infected and the seat of inflammation. Its course is run, an area beyond infected, a decline of the process seen. And so this creeping mycotic inflammation extends from large to small, from small to smaller tubes, extending over a considerable period of time, until the soil liable to infection is exhausted or the patient succumbs to the disease.

There are still several points in regard to the natural history of the disease concerning which we are still in ignorance :

Does auto-infection take place from the tissues within the body, or does re-infection arise from extraneous conditions, such conditions being due to the affected individual? In other words, is the patient in constant danger of being re-infected from the discharges, such as the abundant expectoration, which have not been properly disposed of? That the former is more than possible, the laws of mycotic inflammation well support. That the latter is likewise possible all principles of infectious diseases uphold. Clinical observations and the results of management conducted in accordance with such ideas confirm the truth that re-infection is the cause of the grave and protracted or relapsing cases of whooping cough.

In managing the disease every precaution should be taken in regard to quarantining, etc., that we are so careful about in scarlatina. The younger members particularly of the family should be protected. All discharges should be disposed of in accordance with antiseptic regulations ; all

personal clothing and bed linen should be treated accordingly. The patient's body should be disinfected by baths, etc., daily. The attendants should be disinfected likewise. The room should be furnished as we are wont to do in cases of scarlatina. If possible, frequent changes to another room should be made, the room just occupied being thoroughly disinfected in the interim. Removal to the seashore or to the country is most efficacious with city children.—*Climatologist*, Nov. 15, 1891.

**Anderson (T. W.) on the Treatment of Typhoid Fever by Perchloride of Iron.**—The treatment consists in administering a full dose of the liq. ferri perchloridi fort., namely 5 minims (for an adult) every hour of the day and night, until a week has elapsed from the complete subsidence of the fever. To enable the patient to take this, the dose is combined with half a drachm of glycerine or one drachm of simple syrup, and a few drops of tinct. zingib. fort., and diluted in half a tumblerful of water. If sickness is caused, five grains of bismuthi subnit. are given ten minutes before each dose of the medicine until nausea ceases to be produced. In a few days the diarrhoea will be arrested, and thereafter a mild aperient must be given daily as long as the medicine is continued.

In a moderately severe case not brought under this treatment until the end of the first week of fever, it will take ten days to reduce the temperature to normal. If the medicine is not given every hour night and day it will take a little longer; if begun within two or three days of onset of fever, the latter will be gone in about five days. The patient sleeps in the intervals between the doses at night, and of all the serious symptoms of typhoid most never appear, and any present at first disappear rapidly.—*Brit. Med. Jour.*, Dec. 12, 1891.

**Frodsham and Steedman on a Case of Hyperpyrexia of Rheumatic Fever; Treatment by Cold Bath; Recovery.**

—The patient was a stout man, aged sixty-two with a previous history of rheumatic pains for three weeks, but no previous similar attack. When first seen on March 16th, 1891, he had all the signs and symptoms of rheumatic fever; articular pain and swelling; temperature  $102^{\circ}$  F. He was sent to bed, and took fifteen grains of salicylate of soda every four hours. For five days there was no improvement, the temperature varying between  $101.5^{\circ}$  and  $103^{\circ}$ . On the sixth

day (March 21st), at 11 A.M., his temperature rose to  $106^{\circ}$ ; he was semi-conscious and without pain; skin dry. He was given four grains of sulphate of quinine every hour. At 3 P.M. the temperature was  $105.3^{\circ}$ ; there was profuse perspiration, consciousness had returned, and he answered questions rationally. At 6 P.M. the temperature rose again to  $106^{\circ}$ , the patient becoming unconscious and livid, with stertorous breathing; in fact, he was rapidly dying. Having consulted together, it was decided to bathe him at once. He was given some brandy, and then put into an iced bath at  $44^{\circ}$  F. By means of large quantities of ice the water was kept at this temperature throughout. After he had been in the bath fifteen minutes the temperature in the rectum was  $107.2^{\circ}$ ; after twenty minutes,  $105.5^{\circ}$ ; after thirty-five minutes,  $103.5^{\circ}$ . He was taken out after he had been in thirty minutes. The pulse at first, and for fifteen minutes, was very irregular, jerky, and intermittent, but became quite regular as the temperature went down. At 12 midnight the temperature was subnormal; he was perfectly rational, and remembered nothing about the bathing. Feeling cold, hot-water bottles were applied. He had had two hours' sleep. Next day (the 22d) the temperature rose to  $105^{\circ}$ , with a return of articular pain. From this date he steadily improved, the temperature reaching normal on the 31st; and though, since then, he has had several slight attacks, with pain and slight rises of temperature, he is now, and has been for the last four months, perfectly well.—*London Lancet*, Oct. 31, 1891.

**Putnam (W. E.) on Belladonna as a Prophylactic in Scarlet Fever.**—

The writer says: Two years ago I was called to attend a case of scarlet fever, the patient being a girl five years of age. The disease, after running a severe course, terminated in recovery. There were two other children in the family, one younger, the other seven years of age. Upon my first visit I had both these children take a teaspoonful of a solution of belladonna (thirty drops of tinct. to three ounces of water) every three hours. The younger child showed symptoms of the disease two days after I commenced treating his little sister. The symptoms were sore-throat, vomiting, with pyrexia, the condition being similar in almost every respect to that manifested early in the scarlet-fever case.

On the second day fever was lower, and sore-throat somewhat better. No vomiting. Third day, all symptoms better, child being convalescent. No rash appeared. I continued belladonna throughout. The elder child had no symptoms of the disease. While in attendance on other cases at this time I gave belladonna in other families as a prophylactic, with the best results.

I had another case during that same year in which the conditions were similar to those detailed above, and belladonna seemed to act as an abortive agent.

Last week I was called to a severe case of scarlet fever, the patient being a boy four years old. I put a little girl living in the house, on belladonna as a prophylactic, with the result that three days ago she had the sore-throat, vomiting, and pyrexia, all symptoms passing away on the third day, without rash.—*Med. Brief*, Nov., 1891.

**Loebinger (H. J.) on Terpine Hydrate in the Asthmatic Stage of Hay Fever.**—The theoretical supposition that in cases of hay asthma after the application of a correct dose, and that is upon what the effect depends, a speedy remission of the asthmatic symptoms by means of a copious expectoration will take place, has been thoroughly proved *in praxi*. When I have administered terpine hydrate in doses of one gramme in capsules, to be taken three times daily after each meal, an improvement has almost immediately been evident. Yes, often as soon as in an hour after the first dose a copious light fluid expectoration, together with a cessation of the spasmodic phenomenon, has taken place.

This improvement was permanent when the medicine was continued with, although frequently the phenomenon of irritation in the nose and throat would remain.

I could here bring forth the history of a series of cases, which, however, appears superfluous, as the same are more or less uniform.

Before I conclude I wish to direct attention to a diagnostic application of the remedy. In cases of phthisical patients whom I subjected to my local therapy by means of insufflation of a compound powder saturated with ethereal oils, when an insufficient or difficult expectoration was found, I administered terpine hydrate in order to obtain a more copious sputum adequate for microscopical examinations.

And also for prognostic purposes—if at the conclusion of successful treatment, such as described in my former publications, a dry cough still remains—terpine hydrate can be used in this way.—*N. Y. Med. Four.*, Dec. 12, 1891.

**Rexa (H.) on Therapeutics of Hay Fever.**—The author advocates the use of terpine hydrate. In small doses (from 2 to 5 grains) it liquefies and increases the secretion of the bronchial mucous membrane, and thus facilitates expectoration. In large quantities, however (in 15- to 20-grain doses), it reduces the secretion and renders expectoration less, until it stops it altogether. In cases of bronchial dyspnoea, in consequence of the plugging of the bronchi by too copious secretion, it is of the greatest value. In hay and bronchial asthma it acts like a charm, *i. e.*, by giving it to those who are subject to the disease, it arrests the outbreak.

The writer has administered it in capsules (5 grains each), in daily doses of from 45 to 60 grains, and more if required, without any disagreeable consequences. The best time for its administration seems to be during mealtime, about 15 grains being given at one dose, three times a day, and, if required, 15 grains at bedtime; and exceptionally, if asthma symptoms appear on damp, cloudy days. 15 grains more during the night.

He has also had especially gratifying results from the remedy in patients subject to asthmatic attacks.—*Therap. Gaz.*, Dec. 15, 1891.

**Smith (C.) on a New Method of Treating Diphtheria.**—My treatment consists in the *continuous* inhalation of a vapor composed of a mixture of carbolic acid, eucalyptus oil, and turpentine, until the patient is well, and at the same time support to the heart by stimulants, as well as tinct. digitalis, tinct. belladonnæ, and spiritus ammon. aromat. Inhalation is not new, neither are the ingredients, but the method of applying it, and its continuous use, I believe, are so. The method is this: Place the patient in bed—this is imperative,—first, in order to facilitate the inhalation; and secondly, by the retention of the horizontal position as much as possible to spare the heart, for there is decided depression in some cases, especially if the patient be young or the stronger mixture be used, but with proper precautions it is not alarming. Fix a tent over the patient

by arranging a sheet, or otherwise—in cases of children always, with adults generally ; this should not be too large, and should be closed in on every side, *except in front of his face*, so that he can look about and also be readily watched, and be allowed a supply of fresh air for respiration. Clothe him lightly, as the cot soon becomes warm. Mix the ingredients together in the following proportions : carbolic acid 1, eucalyptus oil 1, turpentine 8. This is the most generally useful proportion, but greater strength combined, as I believe, with greater efficiency, may be gained by increasing the relative proportion of the two first, either to carbolic acid 1, eucalyptus oil 1, turpentine 6, or even to turpentine 4 ; this is, however, decidedly more depressing, and more distinctly affects the urine.—*Practitioner*, Dec., 1891.

**Garland (G. M.) on Medical Treatment of Pleurisy.**—The therapeutic indications in the early stages of pleurisy are usually simple and sharply defined ; cough, pain, and fever are the usual discomforts. To allay the cough he has been best satisfied with small doses of morphine (gr.  $\frac{1}{16}$ – $\frac{1}{8}$ ) repeated every hour. It seems to me that such doses soothe the cough better and with less general disturbance than larger doses repeated at longer intervals. Such doses do not much affect the pleuritic pain, and he uses hot poultices therefore. A poultice is of service only before exudation has taken place. As a rule, no antipyretic measures are needed, and thereby is their depressing effect on the heart avoided. For restlessness and headache he gives gelsemium. In persons of a rheumatic diathesis, salol and the salicylates often give speedy results. He advocates the “dry” method in removing exudations and withholding fluids, with the free use of salts in the morning. Seidlitz powders are the most palatable form. If the effusion rises above the third rib in front, tapping is called for.

The causes of sudden death with large effusions are no doubt multiple. Weil concludes that such deaths may occur by thrombosis or embolism of heart or pulmonary artery ; by œdema of the opposite lung ; by degeneration of the myocardium. Such causes as syncope, displacement of the heart, torsion of the great vessels, and hypothetical lesions, like multiple cerebral embolism, may be provisionally accepted, but they require further investigation.

Weil also states that sudden death occurs oftener in right than in left pleurisy, and that it may come without any premonitions.

Why the heart-muscle should be so prone to degenerate in pleurisy is an interesting topic, but one which he has never seen discussed. The phenomenon appears to rank with certain other trophic changes of pleurisy and its kindred affections. It is a recognized fact that an inflammation of any serous membrane is liable to produce atrophy of muscles in its immediate neighborhood. He has seen a gonorrhœal synovitis of both knee-joints produce such excessive atrophy of the thigh muscles that the patient could hardly lift his feet from the floor, and he was many weeks in regaining the power to walk without a cane. Pleurisy is said similarly to affect the muscles on the same side of the chest. Possibly a like trophic influence may be exerted upon the heart.—*Climatologist*, Nov. 15, 1891.

**Robinson (B.) on Creosote in Pulmonary Tuberculosis.**—The writer regards creasote as the most valuable medicinal agent we have at the present time for treating pulmonary tuberculosis. In nearly all cases marked improvement in the symptoms follows its use. The cough is much diminished in frequency and severity ; the expectoration is diminished in quantity and changed in quality ; the nutrition is improved ; the weight is increased ; there is augmented strength and activity ; costiveness of the bowels is relieved ; night-sweats often disappear. Even in the advanced stages of the disease, when cavities are present, the cough is sometimes ameliorated. The temperature is often favorably influenced by the drug. In several instances the bacilli have entirely disappeared from the sputum, as proven by repeated microscopical examinations. In some cases the expectoration has stopped entirely. The physical signs in these cases were also improved. The moist râles disappeared, the breathing became less harsh, and the areas of consolidation smaller. In some cases in which cavities were present at the apices, a marked degree of contraction had followed the use of the drug.

There are few contra-indications for the use of creasote, and these few can usually be obviated by its careful administration. Occasionally the stomach does not tolerate it. It may produce headache or abdominal



pain. These unpleasant manifestations may be due to a too rapid increase of the dose, or to a personal idiosyncrasy of the patient. They are to be overcome by diminishing the dose or interrupting its use for a while. If the drug occasions diarrhœa, the same rules apply, or an opiate can be added to each dose. As to the effect of the drug on the kidneys, Dr. Robinson says that usually it is not present in the urine, although it is found there occasionally, and in some cases he has recognized a passing albuminuria. When large doses of creasote are given the urine should be examined every few days. In cases of already existing renal trouble he has observed no ill effects from the use of the drug. In regard to hemoptysis, it is claimed that creasote in appreciable doses causes congestion of the bronchial mucous membrane and induces hemoptysis. Dr. Robinson said that nothing in his experience corroborates this view. In regard to the drug, itself, the best form to use is that obtained from beech-wood. Much of the so-called creasote that is dispensed in the drug shops is composed of impure carbolic acid. As for the dose, he begins with small quantities, from one half to one minim three or four times a day, and later on every two or three hours, if the stomach will tolerate it. Gradually carry it up to from twenty to twenty-five drops in twenty-four hours. One of his patients had taken as much as seventy-two drops daily.—*Phil. Med. News*, Dec. 9, 1891.

**Kiefer (J. G.) on Cocaine in Peritonitis.**—The distressing pain and vomiting of peritonitis may be promptly checked by a suppository containing one grain each: extract of opium, cocaine hydrochlorate, and iodoform. It will be safe to use one suppository per rectum four hours apart, if the patient is closely watched for toxic effects, which may be noted by cold extremities and enfeebled heart action. The writer was led to the employment of the above on the theory of the malignancy of the affection and reversed peristaltic action of the bowel in peritonitis, and the well-known anæsthetic properties of cocaine on serous membranes. Alimentation should be temporarily suspended, and enema must be avoided until vomiting is checked.—*Kansas City Med. Index*, November, 1891.

**Kyger (J. W.) on the Use of Fruits in Diarrhœal Diseases.**—The numerous writers upon the question of infant foods and infant feeding all recognize

fresh milk as possessing an antiscorbutic element of great value in the proper nutrition of the child, but in all their systems of infant feeding, where this fresh milk can not be obtained, they do not lay sufficient stress upon this point, and do not try substitutions of other forms of nourishment to take the place of this antiscorbutic element contained in human milk.

Many of our cases of acute dyspeptic diarrhœa, cholera infantum, and acute enterocolitis pass into chronic dyspeptic diarrhœa and chronic enterocolitis, leading to atrophy of the follicles and glands engaged in the secretion of digestive fluids. In these classes of cases antiscorbutic foods will save hundreds of children.

It is a well-known fact that the want of vegetable food by sailors, while upon long voyages on the high seas, leads to scurvy; but this can be prevented by the use of raw beef juice, and need not depend upon the absence of vegetable food. I have had most excellent results in the use of fruits, the ripe peach being one of the most easily digested of fruits, containing over seven per cent. of pectous substance. This, when perfectly mellow, can be dissolved in the child's mouth by the simple pressure of the tongue. Such fruits must be mellow, so that no hard particles enter the child's stomach, and must be in condition ready for absorption. When the peach can not be obtained, raw beef juice or other ripe, mellow fruits can be used, but not with the success attending the use of the peach.

Let this antiscorbutic element be considered more by physicians while attempting to raise children upon dry dead foods, and I will guarantee many children will be saved when about to pass into those various chronic stages of digestive diseases among children.—*N. Y. Med. Jour.*, Nov. 21, 1891.

**Barker (W. S.) Polyuria in Phthisis Controlled by Full Doses of Ergot.**—H. E., a mulatto, thirty-one years of age, entered the City Hospital November 7th, with well-marked symptoms of pulmonary tuberculosis. No tuberculous trouble could be located elsewhere than in the lungs. Whether the symptom about to be described was due to tuberculous deposit in the kidney or in the neighborhood of the controlling cerebral centres in the fourth ventricle, could not be satisfactorily determined. During the preceding October the patient had for the

first time been somewhat annoyed by frequent, copious, and persistent micturition. Examination of the urine gave the following result: Acid reaction; specific gravity, 1.004; no albumen, sugar, or casts. But the quantity of urine voided was very considerable, varying from sixteen to twenty pints.

Under the influence of ergot this was steadily diminished. One c.c. doses of the fluid extract were given frequently, about 8-10 c.c. being taken daily. The quantity of urine at once began to diminish, and did so steadily each day, declining from 10,600 c.c. to 2,400 c.c. per day, at which latter figure it remained until the dose of ergot was discontinued or was made much smaller, when a rapid rise in the quantity of urine took place. This was again brought well under control by increased doses of ergot. The patient succumbed to his pulmonary affection in a few months. Polyuria existed until shortly before death. The autopsy revealed only pulmonary tuberculosis.—*Phil. Med. News*, Jan. 2, 1892.

**Stuart (G. A.) on Bismuth Subnitrate as a Dressing for the Umbilical Cord.**—The method of application is as follows: Cut a piece of lint sufficiently large to fold over and prevent the bismuth from being dispersed. Through this a hole is made small enough to fit tightly about the cord and prevent dispersion at that point. The abdomen about the cord is dusted with the bismuth, the cord is passed through the hole in the lint, and the lint pushed well down upon the abdomen. Bismuth enough to completely bury the cord is applied, the lint is folded over smoothly, and the binder applied. The advantages I claim for this mode over all others are the following:

1. Convenience. It has to be applied only once, as the cord immediately dries up, and does not need to be disturbed until it has dropped off.

2. Cleanliness. There is absolutely no odor, and the addition, at the time of the bath, of a little bismuth to places showing evidences of moisture will keep everything dry and sweet.

3. Safety. Mothers and nurses are not meddling with the dressing, since everything goes on satisfactorily. There is left no sloughing, discharging stump to corrode the surrounding tissues and bring on hemorrhage or predispose to hernia.

4. The cord drops off sooner than by any other method. For small cords three days, for large ones five—rarely exceeding six—constitute the usual time.

5. A better and firmer cicatrix is left than by any other method known to me.—*Phil. Med. News*, Dec. 19, 1891.

**Potter (H. P.) on the Treatment of Suppurating Inguinal Glands.**—

The surgeon frequently meets with cases of chronic suppurating glands with one or more sinuses, which cause but little pain and inconvenience, yet have no tendency to heal save with perfect rest on the one hand, or with the more vigorous measures about to be described, on the other.

The condition referred to is one occurring as a sequel to an excoriation of the lower extremity, a strain of the structures of the groin, or suppuration without any definite history or objective sign indicating the cause. The inflammation seldom ends in resolution, because the patient fails to recognize the importance of rest; thus suppuration ensues, and if the abscess discharge spontaneously, or if it be incised, a sinus remains leading to a gland, and this passage is found to burrow both superficially and deeply. In these simple non-specific cases the granulations are doughy, velvety, anæmic, and easily separable. The pus undermines the skin with purple discoloration; the integuments are thinned, and the healing process is tedious in the extreme. The destruction involves the tissue around the glands rather than the glands themselves.

From a late experience of ten cases (males three, females seven), in which chronic indolent sinuses existed, an anæsthetic was administered and free scraping with Volkmann's sharp spoon performed, as well as the removal of the glands and sloughing adenoid tissue. The surface is first cleaned and rendered as far as possible aseptic. In practice it is not found necessary to divide bridges of tissue between neighboring sinuses, so long as the under surfaces of these are carefully scraped. The spoon is freely applied to all parts covered by granulations, and a smaller-sized instrument passed along the canals leading deeply. All exposed glands are torn away or twisted from their attachments, and the bed on which they lie scraped. The cavity is washed out with a solution of chloride of zinc (gr. xx. to ʒ j.), a thick pad of antiseptic gauze is applied, and firm pressure maintained by means of a spica bandage.

As a precautionary measure, and in the more extensive operations in order to avoid movement, an outside bracketed splint is used.

Cases of chronic suppurating adenitis which have existed from two to four months have, by the above-mentioned treatment, rapidly healed. A surface capable of throwing out healthy granulations is produced. The removal of the morbid tissue, which probably acts more or less as a foreign body, expedites the healing process. The coaptation of surfaces induced by pressure causes the permanent union of the parts concerned.—*Practitioner*, Dec., 1891.

**Wolfier on the Mechanical Treatment of Erysipelas.**—This writer as is well known is in favor of treating the disease by means of checking its march with adhesive plaster—placed just in front of its line of advance. Where the parts are covered with hair, as the head, it is better to shave them before applying the plaster; in females, however, it is not always necessary to shave, as the hair can be parted and tied to the crown without hindering the application of the strips. Before any of the strips of plaster be removed care should be taken that a new band of plaster be applied. This removal sometimes arises from the primary application being placed rather near the focus of radiation. If the adhesive be applied exactly it will be found that the progress of the rosy color will be checked, and will rarely go beyond this artificial line of demarcation. In exceptional cases this rule may not be exactly adhered to, but in these cases it will not extend beyond two or three fingers' breadth. If the plaster be not exactly applied the redness is likely to extend beyond its limitations within a few hours.

One is sometimes tempted to remove the strips too early, which requires much care in the successful treatment, as the redness may flit about and settle down in some more distant part. Two to three days after the redness and fever has gone is little enough, but it is safer to allow them to remain four or five days after all symptoms have subsided. Since his last communication on the same subject he has treated sixteen cases of erysipelas, thirteen of which were on the face and head, and the whole were treated within six months. On the former occasion thirty were treated within ten months, of which two ended fatally. Frequently, it may be observed, that in the

under extremities that it has passed the adhesive barrier, and is rapidly progressive in area and defying all mechanical restraint. A similar condition is observed when erysipelas is treated by Kraske-Riedel's method—scarification—so that the presumption cannot be entertained that the movements of the extremities have disturbed the adhesive plaster and allowed the inflammatory process to advance.

In attempting a theoretical explanation of this mechanical treatment where the extremities cannot be successfully treated, it is more reasonable to be believed that the streptococcus finds its way onward in a deeper channel through the ligatured portion by the sheaths of the muscles, and escaping beyond to the surface, pursues its onward ravages in the cutaneous surface. This opportunity in the face is absent as the bones lie near the surface, and the adhesive ligature retains the cutaneous surface tightly against the osseous structure, and temporarily cutting off all communication. This effect is also favored by the insertion of the fascia in the neck to the hyoid and thyroid bones that also assist to act as barriers. This view is partially supported by the fact of scarification being sometimes successful in limiting the spread of the red area while the mechanical more frequently fail.—*Med. Press*, Nov. 4, 1891.

**Van Hook (W.) on Laparotomy for Intestinal Perforation in Typhoid Fever.**—This operation has been done 19 times with four recoveries. The writer has operated twice with one recovery. His successful case was that of a woman aged thirty-one, who passed through sixteen days of fever with characteristic symptoms. At the end of this period her temperature was normal. After being free from fever for two weeks she had a chill; next day her temperature was 104°, pulse 120, severe headache and much prostration. A diagnosis was made of a relapse on the eighth day. She had a sudden pain in the right ilio-cæcal region and every sign of intestinal perforation. An abdominal incision and the subsequent exploration confirmed the truth of the diagnosis. The usual surgical procedures were resorted to as in a similar condition from any cause. She recovered in the course of two weeks and a half. From a careful consideration of the subject, the writer draws the following conclusions:

1. There is no rational treatment for perforation in the course of typhoid fever, except laparotomy.

2. The indication for laparotomy when perforation occurs in typhoid fever is imperative.

3. The only contra-indication is a moribund condition of the patient.

4. Collapse is often at least temporarily relievable by hot peritoneal flushing.

5. The stage of the fever is not to be considered as an indication or as a contra-indication for laparotomy.

6. The severity of the typhoid fever is alone not a contra-indication.

7. Early laparotomy offers the most hope.

8. The symptoms of peritonitis should not be awaited before operating.

9. In taking charge of all typhoid fever patients, it is the physician's duty to be ready, in case of perforation, to perform laparotomy.

10. The published statistics of laparotomy for this condition are strongly in favor of operation.

11. The technique, though not complicated, demands much thoughtfulness, acquired dexterity, great rapidity, and thoroughness.—*Phil. Med. News*, Nov. 21, 1891.

**Christie (R. J.) on Operation for Hydrocele.**—The following method of operating for the radical cure of hydrocele, will, I think, be found to have certain advantages. It is particularly applicable when carbolic acid is used, but other fluids may be used by the same means. I have used carbolic acid only, as that agent is much less painful than others and quite as efficient.

Only two instruments are required—one being an aspirator and the other a hypodermatic syringe. The latter should have a capacity of thirty minims and a needle of largest calibre. After properly cleansing the scrotum, the hypodermatic needle is pushed well into the hydrocele and the wire passed into the needle and beyond the point to prevent choking of the needle and jaggings by its point. Keeping the needle securely in the sac, the fluid is then drawn off with the aspirator or trocar. Having withdrawn the aspirator-needle, attach the hypodermatic syringe, filled with pure carbolic acid, to its needle, and inject from ten to thirty drops; clasp the tissues around the needle with the thumb and fin-

ger, withdraw the needle quickly, distribute the acid by gentle manipulations into all parts of the sac, envelop the scrotum in borated cotton or gauze, suspend the testicles, and the operation is completed.

If it is thought desirable, in order to prevent pain, cocaine may be injected through the aspirator-canula and allowed to flow out before the acid is injected, but the carbolic acid itself acts very quickly as a local anæsthetic.

The acid should not enter the needle before it is ready to be injected, else it might coagulate the albumen and stop up the needle.

The only chance for septic contamination is in the passage of the instruments through the tissues, which can, of course, be avoided by sterilization.

The advantages of this procedure are as follows: In all cases where there is a doubt in diagnosis, the needle removes it. It accomplishes the injection without any danger of infiltration. The quantity thrown in is definite to a drop. The method is thoroughly aseptic.—*Phil. Med. News*, Nov. 21, 1891.

**Wright (G. A.) on the Evacuation of Spinal Abscesses without Drainage.**—His conclusions as to the treatment of spinal abscesses are:

1. The first essential is *rest*, in its surgical sense, to the spine.

2. When efficient rest has been provided, an abscess, unless it is increasing, should be left to itself for a period of not less than a month.

3. If the abscess increases and is evidently going to open spontaneously, or, if there is acute suppuration going on, the abscess should be dealt with by Barker's method, provided thorough asepsis can be assured.

4. An abscess that remains stationary for more than two months, or thereabouts, should be dealt with by Barker's method, provided that throughout the period *rest* to the spine has been secured.

5. Receding abscesses should be left alone.

6. Residual abscesses, if stationary or advancing, should be dealt with by Barker's method, and will nearly certainly be cured.

7. Refilling of an abscess or persistence of a sinus after evacuation should be dealt with by a repetition of the operation so soon as it is evident that repair will not take place, *i. e.*, usually in a month.

8. If there be a doubt about the real maintenance of asepsis, either from want of training on the part of the surgeon or his assistants, nurses, friends, etc., the abscess should either be left alone or dealt with by aspiration and injection of iodoform.—*Phil. Med. News*, Nov. 21, 1891.

**Wright (G. A.) on Subcutaneous Tenotomy of the Sphincter Ani in the Treatment of Fistula.**—The ordinary method of dealing with a fistula *in ano* by laying the track open is, though usually successful, a tedious and troublesome affair in regard to the after-management of the wound. The principles of the operation are first to quiet the restless contractions of the sphincter and, secondly, to refresh the granulating surface and allow the wound to heal from the bottom. Attempts to shorten the process by suturing the fistula have been frequently made with more or less success.

In thinking the matter over it occurred to me that, as far as obtaining rest goes, it would be a much less severe method to divide the sphincter subcutaneously at a distance from the fistula, while, if the fistulous track were scraped out, its freshened walls would be brought into contact and healing would occur. I have therefore tried this method in a few cases, and, as I have met

with a measure of success, I am desirous that others should give my plan a trial also. The operation is a simple one. The left forefinger is passed into the rectum and the tip of the coccyx felt for. A sharp-pointed tenotome is then taken in the right hand and thrust through the skin about three quarters of an inch to the left side of the middle line, just in front of the tip of the coccyx; the knife-point is pushed onwards until it is felt by the finger in the rectum beneath, but not through the mucous membrane. The knife is then tilted, and, cutting towards the skin, divides the sphincter subcutaneously close to its origin from the coccyx. The fistula is then scraped out thoroughly with a sharp spoon and some iodoform and boric acid applied with a firm pad and T-bandage.

The method is simple and less severe than the ordinary plan, and in uncomplicated cases, at any rate, is, I think, worth trying, since the subsequent dressing is simplified and confinement to bed shortened. The sphincter might of course be divided subcutaneously at some other point, if preferred.

Out of nine cases, five succeeded, three failed, and one was lost sight of after ten days, but was then apparently well.—*Brit. Med. Jour.* Oct. 31, 1891.

## REPORT ON TOXICOLOGY.

**Thomas (J. C.) on Poisoning by Hydrochloric Acid.**—A girl took about six and one half ounces of the acid. In ten minutes she was found vomiting, prostrated, and in great pain. She rejected magnesia in milk when given as an antidote. A large quantity of mucus, at first clear, but later brown and thick, was also vomited. She rallied somewhat, but had a continuance of the pain, and died suddenly in about twenty-four hours. Autopsy revealed a little fluid in thorax and tarry fluid in heart. Externally, the stomach appeared normal, except a patch about four inches square, beginning two inches from the pyloric end of the large curvature, and extending from the anterior to the posterior surface. This patch was perfectly black, and on its anterior surface were three small perforations, and on the posterior there were two about the size of sixpence. There was very slight extravasation in the peritoneum, possibly due to handling. The en-

tire internal surface of the stomach was covered by a layer (a quarter of an inch thick) of grumous matter, perfectly black. Reaction, just turned blue litmus paper red. The duodenum contained a large quantity of bile, but was uninjured. The intestines were normal, but greatly distended with gas. The liver appeared like a fatty liver, both externally and on section; other organs healthy. The spleen was not discolored, but slightly enlarged.—*Australian Med. Jour.*, Nov. 5, 1891.

**Frank (L.) on Dangerous Symptoms from Cocaine.**—A young man, aged nineteen, undergoing circumcision, received an injection into the prepuce of ten minims of a three-per-cent. solution of cocaine. Anæsthesia was complete in three minutes, and the whole operation completed in thirty minutes after the injection. A few minutes after the patient got up, he felt dizzy, and nauseated. His nausea soon disappeared, the dizziness in-

creased, and the pulse, which before was normal, now became very weak, falling to 56 per minute. Respiration was rapid and shallow. Perspiration began to appear profusely over the forehead, extending over the entire face. Pulse became weaker, going down to 47. Respiration now became very slow, though being still very shallow, and perspiration, which had before appeared only on the face, now covered both the trunk and the limbs, giving the picture of complete collapse, consciousness being retained. The surface of the body was cold, lips blue, and eyes closed. All questions were answered intelligently though slowly. Sensation remained good, muscular weakness marked, no aural or pupillary symptoms. Temperature was not taken, though it was probably subnormal.

Injections of digitalis, atropine, and ammonia caused a speedy recovery.—*Am. Pract. and News*, Dec. 5, 1891.

**Smith (W. A.) on Chloroform Poisoning.**—On the night of the 4th of March, 1891, I was by telephone requested to see a woman at the police-station, the officer on duty informing me that the woman had poisoned herself. When I arrived at the station I found the woman in a semi-conscious condition, sitting on a bench, being supported in that position by the officer who had brought her in. I was informed that she was supposed to have taken a dose of chloroform, with suicidal intent. I at once caused her head to be lowered, and loosened her corsets and other garments. She was at this time quite unconscious, the breathing slow but shallow, the pulse rapid and weak. The conjunctivæ were insensitve. Having no stomach-pump at hand, I injected hypodermatically one third grain of pilocarpine, which in a few minutes produced emesis. There was a very strong odor of chloroform in the vomit. After the emetic had acted the pulse slowly began to improve, and as she could not swallow, I at intervals injected hypodermatically six or eight drachms of brandy. She was now laid on a bed, and as she apparently felt chilly, was well wrapped up in blankets and let alone. In about two hours she began to recover consciousness, and was soon able to tell that she had had an ounce-bottle of chloroform, and desiring to end her life had taken some of it, she did not know how much. She had been able to walk about the streets for an hour, when she was found by the offi-

cer, leaning against a building, her knees hardly able to support her. With his assistance, however, she walked to the station, and there fell into the unconscious state.—*Phil. Med. News*, Dec. 12, 1891.

**Harrington (A. J.) Poisoning by Oil of Tansy.**—A pregnant woman, desiring to produce an abortion upon herself, took twenty drops of oil of tansy at bedtime and the next morning a full teaspoonful. An hour later she took a large dose of Epsom salts, which operated in an hour. Two hours later she was found lying on the floor of the house, looking and acting in a stupid manner. Emetics caused prompt emesis, and the vomited matter smelled strongly of tansy. The neighbors said she had had one or two fits before the doctor's arrival. The tongue had not been bitten, and no effect produced on the uterus. A stimulating treatment of brandy and egg brought her round in about twenty-four hours. The author believes the purgation from the salts accounted for the absence of more severe symptoms.—*Canad. Pract.*, Nov. 16, 1891.

**Mackenzie (T.) on Paraldehyde Poisoning.**—The writer narrates the history of the case as follows: On September 29, at 8 A.M., I was called to see a patient whose husband could not arouse her from sleep. Upon entering the room I at once smelt paraldehyde. The breath had a very strong smell of paraldehyde; the face was slightly flushed, pupils were moderately contracted and quite insensible to light; pulse was 120, respirations 40, and the skin was warm. She was wholly unconscious and absolutely limp, like a person deeply under chloroform. On the previous night, at 11 o'clock, she had by mistake taken 3½ ounces of paraldehyde.

She was treated by the admission of fresh air, by the exhibition of strychnine hypodermically and by the rectum, and later by rectal injections of peptonized beef jelly and aromatic spirits of ammonia. Ammonia to the nostrils and faradic electricity were also had recourse to. At 10 A.M. she remained *in statu quo*. Strong ammonia held to the nostrils produced no effect.

At 3 P.M. the pulse at the wrist became almost imperceptible, the breathing became very rapid, and coarse, bubbling rales were heard all over the right lung. By 4 P.M. the pulse was again perceptible, and the respirations were 60 per minute. At 6 P.M. strong ammonia produced a

slight effect, but she remained quite unconscious. The urine, on being drawn off, was found to be redolent of paraldehyde.

At midnight the respiration was stertorous, the face was flushed, and the skin was acting very freely. At 5 A.M. the enema of beef jelly and spt. ammon. aromat. was rejected, and the patient showed slight signs of returning consciousness. At 9 A.M. she opened her eyes, but she was still quite dazed and unable to speak. From this time she gradually continued to improve, until by 4 P.M. she had so far regained consciousness as to whisper "Yes," in answer to a question. It was thus thirty-four hours before she opened her eyes, and forty-one hours before she was sufficiently awake to understand and reply to a simple question.

Compared with the enormous doses taken by some chronic cases,  $\bar{3}$  iijss is not an extraordinary dose. Still, this was a patient who had but rarely taken paraldehyde, and  $\bar{3}$  iijss was exactly twenty-six times the intended dose—the dose which would have produced refreshing sleep. Such a case as that recorded by Rolleston, in which an hour after the administration of 3 j of paraldehyde to a patient suffering from chronic bronchitis and emphysema there occurred sudden dyspnoea and collapse, is very rare.

The fact that in my case recovery followed thirty-four hours' sleep caused by a dose of  $3\frac{1}{2}$  ounces, is a striking testimony to the safety of paraldehyde as an hypnotic.—*Brit. Med. Jour.*, Dec. 12, 1891.

**Horton (F.) on Prolonged Subnormal Temperature Following the Administration of Antifebrin.**—A railroad laborer, aged twenty-two, had been sick two weeks, and when first seen he presented the symptoms of a well-marked case of typhoid fever; the bowels were very loose; there was tenderness in the right iliac region; rose-colored spots were present; the appearance of the tongue was characteristic, etc. The pulse was 110; the temperature of the mouth was 104°. The patient's surroundings were most unhygienic. Quinine and salol were ordered, with bismuth for the diarrhoea, and cold sponge baths. For nine days the case ran a typical course, but on October 13th (the middle of the third week) the patient's temperature rose to 104°. As the baths were being improperly administered by the family, the writer resorted to antifebrin to

lower the temperature, and ordered the remedy in four-grain capsules, in combination with three fourths of a grain of camphor.

He received a capsule at 10 A.M., on the 14th, another at 3 P.M. At 6 P.M. the temperature was 97°, the pulse 90. The antifebrin was discontinued. At 10 A.M. on the 15th the temperature was 95°, the pulse 84; all treatment was discontinued, and spiritus frumenti f 3 ij given every hour; hot-water bottles were put to the patient's feet under cover, etc. At this time the extremities were cool, but there was no cyanosis. In the evening his condition remained unchanged. On the 16th the morning temperature was 94.6°, the pulse 80. At 7 P.M. the temperature had suddenly jumped up to 104°. Antifebrin was given in divided doses—i. e., two grains every four hours. On the 17th the temperature was 101°, and on the following day normal. From this time on the man made an uninterrupted recovery.

The most remarkable features of the case were: The very low temperature, continuing so long after the drug had been withdrawn—nearly forty-eight hours; the suddenness of the rise from 94.6° at 10 A.M. to 104° at 6 P.M.; its sudden decline again, with no apparent evil result. During the time the temperature was below normal the man did not complain of feeling uncomfortable, but maintained that he felt better than he had for some days, although he would feel chilly if the covers were at all removed.—*Phil. Med. News*, Dec. 19, 1891.

**Ross (A.) on a Remarkable Case of Lead Poisoning.**—A girl while playing accidentally fell when running, and broke the point of a black-lead pencil in the back part of her hand, and which penetrated some depth under the extensor tendons. At the time she took no notice of the affair, and the punctured wound soon healed up, leaving the bit of lead or plumbago imbedded in the hand, under the tendons. About three or four weeks after the accident she began to complain that when at school she could not see to read, as the letters assumed a dull, misty appearance. She could discern distinctly enough white letters on the slate or black board, but not black letters in the book on white ground. This went on for some weeks, unknown to me, and until informed of the circumstance I was completely at a loss to know what the symptoms proceeded from, as she was

otherwise in the best of health, and always had been so. She attended school during the whole of the period, but did not do any reading or writing. One day when examining her pulse and holding her by the hand, I by mere accident put my finger on the hand containing the small bit of lead. This at once drew my attention to the secret and cause of the mischief. I asked her how the lump or swelling came there, when she told me that a few weeks previously, while playing with her schoolmates, she had a fall when running, and broke the point of a lead pencil in the back of her hand as she fell, and there it had remained ever since. I at once cut down upon the lump and removed the portion or bit of lead (about 2 grains) and which had been

imbedded in her hand for upwards of six or seven weeks.

Within a few days after the foreign body was removed she gradually began to regain her usual sight, and which now remains as good as ever. The eyes showed no symptoms whatever of being diseased or affected in any way. The symptoms were peculiar and remarkable; so much so that I had never read or heard of a similar case, showing clearly that, however useful black lead pencils may be in the hands of children, they are not altogether without some danger to health when improperly and carelessly used. The bit of lead on being extracted did not appear in any way reduced in size or altered in color.—*Austral. Med. Gaz.*, Sept., 1891.

## REPORT ON NERVOUS DISEASES.

BY WM. M. LESZYNSKY, M.D.

**Schultz (Richard) on Syphilis of the Central Nervous System.**—In an article entitled "A Contribution to the Study of Syphilitic Disease of the Central Nervous System," the writer gives an exhaustive report of the following case: The patient was a man sixty-four years of age. In his thirtieth year he had a sudden attack of left hemiplegia, which passed off in a few days. He was similarly affected about five years ago, and although the paralysis disappeared, he remained incapacitated for further work. This was followed by frequent headache, pain in the back and chest, and incontinence of urine. While in the hospital, on the day of admission, he had a third apoplectiform attack with left hemiplegia, but the paralysis rapidly subsided. Subsequently there was complete right facial paralysis, bilateral abducens paralysis, left hemiparesis, diminution of sensibility on the entire left half of the body, including the face, trophic changes in the extremities, and incontinence of urine. Death took place from exhaustion about four weeks after admission.

**Autopsy.**—The right Sylvian artery was crescentic and much narrowed. There were several spots of softening in the right optic thalamus, in the right lenticular nucleus, and in the right posterior half of the pons. Spinal meningitis, principally posterior. Slight degeneration of Goll's columns. Well marked degeneration of the pos-

terior nerve-roots. Slight degeneration of the anterior roots. Hyaline degeneration of the walls of the small blood-vessels, and fresh punctate hemorrhages in the gray substance. Hypertrophy of the middle lobe of the prostate, and pronounced bilateral hydronephrosis. The various attacks of transient left hemiplegia are explained by the foci of softening in the right optic thalamus and right lenticular nucleus. The narrowing of the Sylvian artery is looked upon as the cause of the softening. The facial paralysis was the result of softening in the posterior half of the pons. No explanation is given, however, for the bilateral abducens paralysis. All of the other symptoms are attributable to corresponding pathological conditions found in the spinal cord and kidneys.—*Neurologisches Centralblatt*, No. 19, 1891.

**Is it Possible for Crimes to be Committed under Hypnotic Influence?**—This question is fully discussed in an editorial in the *Boston Medical and Surgical Journal*, October 8, 1891. Charcot and the Salpêtrière School maintain that little danger is to be apprehended from this source, while others, as Brouardel and Bernheim, answer the question in the affirmative. Kingsbury, in a recent article in the *Nineteenth Century*, demands that ignorant dabblers in hypnotism be restrained by law from experimenting; that public exhibitions of hypnotism, being



generally made with subjects hired for the occasion, and adapted to the production of sensational effects, be prohibited; that all employment of hypnotism, although he would not confine it to medical practitioners exclusively, should be restricted, in the same way as vivisection, to men who devote themselves to it scientifically, and should be practised by license only.

From what has been said and written upon this subject, it will be seen that the hypnotic influence may in some instances be abused to the detriment of others by unscrupulous persons, though the danger from this source is easily exaggerated. The conclusion, at any rate, is legitimate, that hypnotism is a power which should be exercised cautiously, conscientiously, and under restrictions and conditions which should be clearly defined.

**Jacoby (G. W.) on the Electro-Physiology of Reflexes, with the Description of a Hitherto Unknown Localized Physiological Reflex Phenomenon.**—The writer claims that our knowledge of reflexes produced by electrical excitation is still in its infancy, and an electro-physiology of reflexes does not yet exist. The reasons assigned for this lack of knowledge are the necessity of employing very strong currents, and the difficulty of deciding whether contractions thus produced are reflex or not. These reasons he considers entirely invalid. After numerous experiments, he discovered a reflex, produced by the application of the negative pole of a galvanic battery to the radial side of the forearm, which consisted in a contraction of muscles of the chin. Examination of two hundred persons showed that the reflex was present in over seventy per cent. of normal individuals. The experiments were conducted by placing a large Erb electrode over the back of the hand, and then making closure of the current with a small electrode attached to an interrupting handle. All such experiments upon the human body have heretofore been entirely dependent upon the statements and feelings of the patient. These unreliable factors can now be eliminated by utilizing the reflex described, as hereby we have a visible proof of the sensory reaction. Jacoby does not doubt that, attention having now been called to this reflex, other reflexes of a similar nature may be found in various parts of the body, and that we will by their examination

obtain knowledge, not only in regard to the pathological changes in sensory nerves, but also in regard to changes in that part of the cord upon whose integrity the excitation of such reflexes depends.—*New York Medical Journal*, Oct. 31, 1891.

**Williams (P. W.) on a Case of Tumor of the Pons.**—The patient was six years of age. One year previous he occasionally stumbled and fell. He was slightly hydrocephalic. There was no evidence of syphilis or tubercle, nor any history of convulsions. When first seen, the right side of face was paretic, pupils were large and inactive, and there was right internal strabismus. The left optic disc was blurred. Gait unsteady, but no dragging of either leg; knee-jerks normal. He slept fairly well, and did not complain of headache; was very irritable, and subject to violent fits of temper. Hearing good. No vomiting. Urine contained a trace of sugar, but no albumen. Sp. gr. 1030. As the disease progressed, the following symptoms gradually developed: Paralysis of right external rectus; vomiting; and left hemiplegia. No convulsions. No pain. Within two months death took place from exhaustion.

The autopsy was made on the following day. All the ventricles and sub-arachnoid spaces were distended with fluid, and displayed the usual conditions in chronic hydrocephalus. The central parts of the cerebral hemispheres were softened.

The whole of the pons was involved in new growth, and was much swollen on its interior surface, and bulging above into the fourth ventricle.

Both crura cerebri were likewise enlarged by the extension of the growth, and the structures and nerves in relation with the pons and crura distorted and compressed.

The third nerves of both sides are seen flattened and displaced. The sixth nerves, too, are winding round the bulging posterior border of the tumor, especially that on the right side; which explains the paralytic condition of the right external rectus muscle.

Externally this infiltrating growth was colorless and almost translucent on the surface. Internally it was red and very vascular.

Miscroscopical examination showed that it consisted of small round and oval cells enclosed in a granular, finely fibrillated intercellular substance, a typical glioma.

This case, like the majority of gliomatous tumors of the pons, shows how impossible it is to determine the extent of the growth before death; for though the symptoms may enable one to roughly locate the tumor, the post-mortem examination generally reveals a great deal more than the physical signs observed during life would lead one to suspect.—*Bristol Med.-Chirurg Jour.*, Oct., 1891.

**McCaskey (G. W.) on Persistent Masticatory Spasm.**—The case reported is one of persistent spasm of the right masseter muscle, excited by articulation but never by the proper movements of the muscle itself in mastication. As possible sources of local irritation in the neighborhood of the muscle, the patient had had mumps on the corresponding side, while the right side of the mouth had been subjected to inordinate and prolonged stretching for several hours in a dental chair, which had

left effects which had persisted. The tongue on that side was red and irritated, and the laryngoscope revealed marked redness of the mucous lining of the larynx.

General health greatly depressed by overwork, excessive use of tobacco, and domestic affliction.

Almost complete loss of knee-jerk, paresis of internal recti, with Rombergh's symptom, created suspicion of tabes, which was, however, excluded.

Nearly complete recovery in a few months.

Case regarded as of the nature of a reflex process, the afferent impulse being probably transmitted through gustatory branch of fifth, originating in peripheral irritation of tongue, and producing spasm because of the lowered tonus of the general nervous system, and the unstable state of motor impulses.—*The Medical Progress*, Louisville, Ky., Oct., 1891.

## REPORT ON PATHOLOGY AND MEDICINE.

**Abbott (A. C.) on Infection and Immunity.**—The writer discusses in full the various theories that have from time to time been presented, and carefully reviews the experiments made by many observers. He considers that our present knowledge may be embraced in the following propositions:

1. That, of the hypotheses that exist for the explanation of immunity, that which assumes acquired immunity to be due to reactive changes on the part of the tissues has received the greatest support.

2. That immunity is most frequently seen to follow the introduction into the body of the products of growth of bacteria that in some way or other have been modified. This modification may be artificially produced from the products of virulent organisms and then introduced into the tissues of the animal; or the organisms themselves may be so treated that they are no longer virulent, so that when introduced into the body of the animal, they eliminate poisons of a much less vigorous nature than is the case when they possess their full virulence.

3. That immunity following the introduction of bacterial products into the tissues is not the result of the permanent presence of these substances *per se* in the tissues, or to a tolerance acquired by the

tissues to the poison, but is probably due to the formation in the tissues of another body that acts as an antidote to the poisonous substance.

4. That this protective proteid that is eliminated by the cells of the tissues need not of necessity be antagonistic to the life of the organisms themselves, but in some cases must be looked upon more as an antidote to their poisonous products.

5. That in the serum of the normal circulating blood of many animals there exists a body that is capable, outside of the body, of rendering inert bacteria that, if introduced into the body of the animal, would prove infective.

6. That, in many instances, infection may be looked upon as a contest between the bacteria and the tissues, carried on on the part of the former by the aid of the poisonous products of their growth, and resisted by the latter through the agency of proteid bodies normally present in their integral cells.

7. That when infection occurs it may be explained either by the excess of vigor of the bacterial products over the antidotal or protective proteids eliminated by the tissues, or to some cause that has interfered with the normal activity and production of these bodies by the tissues.

8. That phagocytosis, though frequently

seen, is not essential, to the existence of immunity, but is more probably a secondary process; the bacteria being taken up by the leucocytes only after having been rendered inert through the normal germicidal activity of the serum of the blood and other fluids of the body.—*Practitioner*, Dec., 1891.

**Joynt (H. N.) on the Influence of one Fever on Another.**—The paper is confined to the consideration of the effect of scarlatina on other zymotic diseases.

Diphtheria is undoubtedly the most common complicating fever, and, like scarlet fever, as a rule, locally attacks the mucous membrane of the entrances to the food and air passages—namely, the tonsils and pharynx, the nares and larynx. Diphtheria may complicate scarlet fever at two periods—during the acute stage and during convalescence, with different results. During the acute stage, from the second to the sixth day, small grayish patches occur on the tonsils and uvula coalesce, and quickly cover the whole tonsil with a thick yellowish sloughy-looking exudation. This, spreading backwards to the pharynx and adjacent structures, or upwards through the nares, gives rise to an abundant, fetid, irritating, muco-purulent discharge. It may ascend the nasal and lachrymal ducts, and cause membranous conjunctivitis. As the ulceration increases, gangrenous shreds and casts come away. If forcibly removed a raw, bleeding surface is left, on which the membrane quickly re-forms. That the membrane in many cases is due to true diphtheria I think the following points prove: (1) the exudation in its appearance and mode of growth is indistinguishable by the eye from the membrane of true diphtheria, and histologically it is identical in structure, consisting of a fibrinous network entangling in its meshes white cells, epithelial cells, and debris, and swarming with colonies of micrococci and bacilli; (2) it attacks not only the throat, but any other raw surface or wound on the patient's body may become the seat of the membrane. Thus I have seen it on the edges of cervical abscesses, on the paronychia ulcers of children's fingers caused by picking their lips and nose, on the surfaces of burns and other wounds in patients suffering from so-called "surgical scarlatina"; (3) it may spread to other patients who before were free; and (4) I have never seen a patient who had a severely ulcerated and mem-

branous throat develop diphtheria when exposed to it later during convalescence.

The other zymotic diseases may be briefly dismissed. Röteln is undoubtedly increased in severity; from being at ordinary times a trivial complaint, after scarlet fever it often assumes a malignant type. The tonsils are often badly ulcerated and accompanied by a free nasal discharge; otorrhœa, lung complications, such as bronchitis and broncho-pneumonia and laryngitis, are common and fatal. The rash may be dark or livid, the temperature high, and the pulse rapid.

Varicella too is more severe than usual. Temperatures of  $103^{\circ}$ - $104^{\circ}$  are frequent; the vesicles become pustular and form large scales, under which ulcers form; these heal but slowly and leave deep pits. Convalescence is slow, and albuminuria is often noticed. Bright erythematous rashes at the onset are fairly common.

Pertussis does not seem to be influenced by scarlet fever. Perhaps the paroxysms were lessened in force and frequency; but then the children were in hospital.—*Practitioner*, Nov., 1891.

**Houser (W. W.) on Sewer Gas as a Cause of Typhoid Fever.**—The author relates the following striking circumstance:

Two boys, aged about nine years, were returning from school, when a violent thunderstorm, coming up suddenly, made it necessary for them to take shelter. Some large tile lying near the mouth of the city sewer was utilized by them for this purpose, they thinking it would be a funny place to get in out of the wet. It being about September 1st, the sewer was dry and had been for a long time. It turned out to be an unusually heavy rain, and flushed the sewer with a torrent of water. The boys held their ground until forced out by the rushing water and what they described as the most horrible smell they ever encountered.

Within less than two weeks they were both taken sick with what turned out to be typical typhoid fever. The disease ran a full four weeks' course, and required as much more time for convalescence.

The boys lived in widely different parts of the city, and there was no epidemic of the disease in the town at the time. Their cases were as nearly alike as two cases of sickness could well be, and there is no doubt but that the stagnant, foul air and

gas of the sewer, with which they were brought in such immediate contact, was the direct cause of their long and dangerous sickness.—*Chicago Med. Times*, Nov., 1891.

**Wilber (G. D.) on Ehrlich's Test in Typhoid Fever.**—Ehrlich's test requires for its successful application the two following named test solutions: No. 1, containing a saturated solution of sulphanilic acid in diluted hydrochloric acid, reduced to five per cent., and No. 2, consisting of a one half per cent. solution of sodium nitrite, to be kept in separate bottles until wanted for use; then forty c.c. of solution No. 1 and one c.c. of solution No. 2 are mixed together in a measuring-glass and briskly agitated, when the following named reactions take place—viz., the hydrochloric acid and sodium nitrite react on each other, liberating free nitrous acid in the nascent state, which reacts with the sulphanilic acid and liberates in the mixture diazo-benzene-sulphonic acid, the essential substance in the final test mixture which is employed to react on the urine, to bring out the play of colors characterizing Ehrlich's test. While sulphanilic acid may be replaced by other similar bodies in preparing test solution No. 1, neither of the other compounds can be omitted in preparing the test solutions without spoiling and defeating the experiments.

The author believes that the test is a reliable one, but he insists that carelessness in its application leads to many failures with it. Many use sodium nitrate for the nitrite, and some omit the latter entirely. Either of these procedures entirely vitiates the value of the test.—*N. Y. Med. Record*, Oct. 24, 1891.

**Brady (E. J.) on One Mode of Infection in Typhoid Fever.**—The point made is illustrated in the following histories:

The writer was called to see "A.," aged four and one half years. His temperature was 104°; had typical typhoid tongue, diarrhoea, headache, pain in abdomen, with tympanites; ailing about a week. No complications arose, and the patient made a good recovery.

Four or five days after his first visit to "A." he was called to "B.," aged five years. The latter had been sick for four days, with symptoms like those of "A." Temperature 102°. From the mother he learned

that Mrs. "A." had a cow for her own use, which she milked herself, attending, of course, occasionally, as mothers will, to her sick child, and that she (Mrs. "A.") supplied her friend, Mrs. "B.," with the surplus milk not required by her family. No other member of either family contracted the disease, though both had for a time the same milk supply. The second case also did well.—*Med. Press and Circular*, Dec. 9, 1891.

**Neale (R.) on a Second Attack of Varicella after an Interval of Ten Days.**—The recurrence of an attack of varicella is so unusual that its possibility has by some authors been entirely denied. Thomas states that the disease is never followed at once by a complete attack, while Trousseau is almost the only authority who has seen second attacks of chicken-pox. The following case will prove that it may happen, although undoubtedly very rarely.

In the month of October I attended a family of children for chicken-pox, one of whom, a boy aged five years and a half, had all the symptoms of the complaint, numerous vesicles and considerable drowsiness, the attack running its usual course. Ten days after the disappearance of the acute symptoms, and when on the point of being allowed out, a profuse crop of vesicles appeared, which were far more numerous than on the first occasion, and the child again went through all the stages of the original attack, the constitutional disturbance being but slight.—*Lancet*, Nov. 21, 1891.

**Taylor (J. M.) on Mixed Exanthematous Infection.**—A robust boy of nine years had, on the morning before I saw him (November 10th), been apparently in perfect health. At mid-day he came home from school complaining of having "caught cold," and feeling a slight soreness of throat. At night the mother noted a bright rash extending over almost the entire surface of the body. On the 11th this rash was uniformly distributed over the entire surface—a vivid, dusky red. The skin felt hot, stinging, and much roughened by plainly visible papules. These papules were especially prominent upon the forehead, about the ears, and the edges of their conchas, and on the neck. The pharynx was irregularly punctate and dusky. On each of the tonsils was a dirty-yellow ulcer, just about the size and shape

of a small watermelon-seed. The tongue was perfectly clean and moist, remaining so throughout the attack. The conjunctivæ were clear and free from injection. The bowels were said to act regularly and sufficiently. The urine for a day or so had been less than normal and of higher color, though voided with increased frequency.

The boy had thrice before had measles, but scarlatina he had not had. There were symptoms of an acute coryza, with slight cough. The fever was quite active; there was also a full, bounding pulse, but undisturbed breathing. Next day the lad seemed very well, had slept well, called lustily for stouter food, and emphatically proposed going out to play. The fever had lessened markedly, the urine had increased and become of better color. The throat was almost well. Each of the papules already noted had become a tiny vesicle, and the dusky blush, though still uniform, was of a paler tint, with purplish tones. The eyes now seemed injected, and distinct complaint was made of sensitiveness to light.

The next day but one I saw the lad again. The fever had quite gone, the cough was more pronouncedly bronchitic, the eyes were no longer red, the throat was quite healed. Another day passed without my seeing the patient, and on the 16th, lo! the whole surface of the body was now fully desquamating in huge plates. Certain fingers threw off complete glove-like casts. There remained only this and a slight cough. I saw the boy only once more, some days later, still confined to his room. There was but a patch here and there of half-detached scales on the abdomen, the toes and fingers being immaculately clean. I suspiciously searched the urine for albumen, but found none.

Undoubtedly scarlatina often shows itself as a papular eruption. It rarely exhibits the nasal and conjunctival catarrh so characteristic of measles. But the most curious feature of this case was the punctation of the pharynx—one of the most important premonitory signs of rubeola,—the clean tongue, and the very early and complete desquamation.—*Phil. Med. News*, Dec. 19, 1891.

**Manning (N. S.) on a Rare Complication Following Scarlet Fever.**—Three cases are reported. They are the only ones recorded in the records of the

Birmingham (Eng.) City Hospital, where over 6000 cases of the disease have been treated in the last four years.

Case 1, girl, fourteen years; admitted April 26th; severe case; got up May 16th.

May the 17th her legs were swollen from the knees down. The swelling pitted easily on pressure, and there were several large irregular-shaped black blotches, due to subcutaneous extravasation of blood, about the ankles and feet. She complained of pain in the limbs, and there was tenderness on pressure. The temperature and pulse were normal, and there was no albumen in the urine. The patient was kept in bed for a few days, when the swelling quickly subsided and the discolorations gradually disappeared. When allowed up again there was no return of these symptoms, convalescence being uninterrupted. She was discharged on June 16th.

Case 2, laborer, aged twenty-five, and Case 3, a clerk, aged eighteen, presented a similar condition. The writer remarks that in scarlet fever, as in all other debilitating diseases when convalescent patients are first allowed to get up, slight œdema of the ankles and feet is not uncommon, but the subcutaneous ecchymoses noticed in the above cases are very rare. The interest in these cases lies in the relationship which probably exists between the morbid vascular change which produced the extravasation in them, and that which causes the very rare and rapidly fatal phenomenon, in which very dark purple or black progressive patches, surrounded by an inflammatory zone and accompanied by great pain and tenderness at the seat of lesion, appear on various parts of the body and limbs.

There was no history of hæmophilia in any of the cases.—*Birmingham Med. Jour.*, December, 1891.

**Fraux (L. A.) on Treatment of Pertussis.**—In the first stage the treatment should be nearly the same as for a mild idiopathic catarrh, consisting of gentle expectorants, guarding against complications, by keeping the patient clothed in woollen garments, attention to the digestive and intestinal functions, and all those hygienic measures which preclude the possibility of taking cold. Should there be much bronchitis with accelerated breathing, frequent cough and fever, mild counter-irritation of the chest, the use of an

oil-silk jacket, and a few minims of tincture of aconite, will probably give relief. There is one other indication for treatment which I think very important. There is a specific germ in the air passages, irritating the delicate membranes and causing the disease. We should endeavor to find some agent capable of neutralizing and rendering inert this poison. The means by which this can be accomplished are vapor inhalations charged with some antiseptic. A remedy is required which will diminish the sensitiveness of the laryngo-tracheal surface, and destroy the germ of the disease in this location, where its local manifestations occur. Such an agent we have in carbolic acid, inhaled from a steam atomizer for three to six minutes every two to six hours, according to the severity of the cough. An alkali combined with the carbolic acid is more efficient, as it renders the mucous more fluid. The following prescription has given valuable results :

R Ac. carbol. (cryst.) . . . gr. iij.  
 Sod. biboratis,  
 Sod. bicarb., . . . aa 3 i:  
 Glycerini,  
 Aquæ, . . . aa 3 i.  
 M. Sig.—Use in steam atomizer.

—*Med. Age*, Oct. 26, 1891.

**Frazer (E.) on Primary Catarrhal Syphilis.**—Towards the end of July I was consulted by a young man, aged twenty years, for a discharge from the urethra. The discharge was profuse and of a purulent character, with scalding during micturition. None of the glands was enlarged. He at once admitted having had connection, three weeks previously, with a woman in a certain garrison town some miles distant. I prescribed an injection of subacetate of lead, and in two weeks the discharge had quite ceased, and the patient declared that he felt quite well. I thought nothing more of the case until a month later, when the patient returned complaining of sore-throat and a rash over the body. The rash was distinctly syphilitic, and the throat bore all the characteristics of that disease. I closely questioned the patient, who steadfastly denied ever having had connection save on that one occasion. On examining the penis I failed to detect any trace whatever of a cicatrix or induration. I administered red iodide of mercury, iodide of potash, and bark. In a fortnight the hair fell off the eyebrows. After this the rash gradually disappeared the throat

got well, and the patient to all appearances regained his usual health.

This is the first case I have ever seen in which syphilis developed itself without a primary sore, and, taking everything into consideration, I am loath to conclude that a chancre existed in the urethra. Rather do I incline to the belief that it is one of those cases of "primary catarrhal syphilis" described by the late Mr. Morgan, of Dublin, and reference to which I have not come across in any standard work on the subject.—*London Lancet*, Dec. 12, 1891.

**Barker (W. S.) on a Case of Glanders.**—L. W., colored, eighteen years of age, has been employed removing ashes, slops, etc. His mental status, on admission to hospital, was quite low, so that his previous history was scarcely obtainable. There was no evidence of any venereal disease, and he gave no history of injury. He stated that two weeks previously to his admission he first noticed a swelling on his forehead over the frontal sinus; that considerable coryza soon set in; that he picked at the swelling, which increased and soon involved adjacent parts. On his admission, some days later, there were irregular nodules about the central and lower parts of the forehead. These proved to be pockets of pus, the skin being intact over them. There was much œdema about the eyelids, extending to the nose and cheeks. There was a small break in the skin over one of the nodules on the forehead, and, by pressing upon the swollen parts below, pus was forced through this opening above, showing rather extensive purulent infiltration. It seemed that systemic disturbance had not been very great heretofore, but it became so now. The temperature was 101°. Two days after his admission the man complained of pain and of impaired function at the right elbow. On examination a small semi-fluctuating swelling was found on the flexor side of the right elbow. The temperature next day rose to 104°, and his condition became steadily more aggravated. Pus was found in the swelling at the right elbow. Two days later pustules appeared in various parts of the body, varying in size of a pin-head to that of a five-cent piece. The numerous lesions were all covered with epidermis and extended quite deeply, containing a milk-like pus. These were incised. The older lesions on the forehead and nose had now assumed a very repugnant character, the tissues all steadily

sloughing away in a horrible manner. Latterly delirium was pronounced. The patient died on the eleventh day after admission. On post-mortem examination one lung presented an extensive purulent focus. A microscopic study of the contents of the pustules confirmed the diagnosis of glanders.—*Phil. Med. News*, Dec. 26, 1891.

**Windle (J. D.) on a Case of Purpura Hæmorrhagica.**—The writer was called hurriedly on the morning of September 8, 1891, to visit Mrs. W., aged seventy-five years. He found her in bed in a collapsed condition. He was told that she had fainted whilst walking in the garden, and that she had lost a considerable quantity of blood from the rectum and vagina. She had previously enjoyed very good health, and had never been known to lose any blood in the same way before. The trunk, arms, and legs were almost covered with spots of variable size, and the majority of them dark purple in color. They were evidently subcutaneous hemorrhages. She was also losing a considerable quantity of blood both from the rectum and vagina. He prescribed bed, quiet, ice to suck, and slop food, together with a mixture of gallic acid, sulphuric acid, and ergot.

Her condition remained much the same for the next two days, with the exception that the bleeding had in a great measure abated. On the third day she passed about half a pint of blood by the rectum; there was hæmoptysis and bleeding from the nose, together with a large subcutaneous extravasation over the upper lip. The gums were not swollen. On the fourth day she complained of numbness and loss of power in the left arm. On the evening of the fifth day she became comatose, and died in that condition the next day, presumably from cerebral hemorrhage.—*British Med. Jour.*, December 12, 1891.

**White (F. F.) on Bony Deposits in the Skin.**—The author's patient, a man sixty-five years old was injured in a railway accident by escaping steam, having the skin of his legs almost entirely destroyed. Recovery was for a long time considered hopeless, and the process of healing occupied five years. The bone plates did not make their appearance until long after. A quarter of a century elapsed in which the cicatrices had time to wear out, as Erichsen terms it, and to all appearance the cica-

trices have worn out, the new skin being generally movable over the underlying structures. During the last twenty years the development of bony masses in the deeper layers of the skin has been steadily going on. At one time a bony mass encircled the left leg like a garter. A large plate formed in each calf, and in front of the knee joint there is hardly a square inch of skin that has not been invaded by the calcifying process. From time to time removal of these plates has become necessary on account of irritation which sometimes gave rise to an acute dermatitis, more often to a sloughing ulcer. Patches of ichthyosis have gradually formed below the knees. This disease is said to be invariably associated with an excess of lime salts in the skin but this case is an exception to the rule.

The bone plates form part of the tissues in which they lie, and appear to have originated in an actual transformation of those tissues. They can only be separated after a careful dissection. Viewed with the naked eye they present all the characteristic features of true bone, but under the microscope one has not been able to discover any typical Haversian system. One sees instead a series of glistening homogeneous lamellæ without apparently any special arrangement of cells or vessels. On the other hand, there are none of the usual appearances of granular degeneration.

It is believed that in such cases there exists some impediment to the superficial circulation. In general terms it is probable that the connective tissue may be an important factor in the process of calcification. The writer is of the opinion that failure of nutrition is not a satisfactory explanation of the calcifying process. It is not indeed any explanation, but as the conditions are sometimes associated, they have been often described as those of cause and effect. But calcification is more often a process of development, when failure of nutrition as a causative agent is out of the question. In regard to the bone plates—the subject of this paper—it may be submitted that they result from the simultaneous action of the processes of deposition and incorporation, the least soluble salts of the nutritive fluids being left by a particularly sluggish current to become subject to the selective activity of the connective-tissue cell.—*Birmingham Med. Jour.*, Nov. 8, 1891.

### Wells (C.) on Sloughing of the Eyeball in Hemorrhagic Diathesis.

—H. M., boy, aged seven. Had been playing with his elder brother, who by accident scratched the patient's left eye with a quill, slightly injuring the conjunctiva. The wound, slight as it was, commenced to bleed, and nothing which the parents could do had any influence in arresting the hemorrhage; consequently a few hours after the accident the boy was brought to the hospital still bleeding. On inquiry it was found that at the age of three he had sustained a slight wound on the shin, which bled profusely and oozed for some days, causing a good deal of trouble. Beyond this, however, there was no history of hemophilia on either parental side.

The patient was a light-haired, clear-complexioned, florid-looking boy. He was well nourished though flabby. To stop the bleeding he was first treated with nearly every styptic available, but without effect. The hemorrhage still continued and, if anything, increased, the blood escaping being characteristically aqueous and thin. Under these circumstances, therefore, it was deemed advisable to try a pad of cotton-wool soaked in liq. ferri perchlor. The pad was not disturbed for two days; at the end of this time, the dressing having begun to give off a disagreeable smell, it was removed; and, as a result of this, the bleeding which had been temporarily arrested, again recommenced. Powdered matico leaves and pressure were tried, but without avail. Lastly, the following method was adopted, and this ultimately proved effectual: A thin layer of lint soaked in liq. ferri perchlor. was applied over the front of the eye, and when the bleeding appeared through this, another layer was added, and this with pressure was left, chlorine water being used to destroy the smell which was considerable. The final result was that the globe sloughed, and in about six weeks' time the boy was discharged from the hospital quite convalescent, but with a shrunken and destroyed eye.—*Med. Press*, Oct. 21, 1891.

**Foy (G.) on Chieromegaly.**—On the 10th November, 1885, I dissected out a tumor, about the size of a large hen egg, from the palm of the left hand of a married woman, aged twenty-six years. The dissection was very tedious, the base of the

tumor, which was fibrous, was attached to the anterior and lateral surfaces of the middle metacarpal bone. Except the trouble and time occupied in removing the tumor, and the fact that the patient, who had a very sweet contralto voice, sang during the whole time she was under the influence of the chloroform, the operation was a very ordinary one.

About twelve months prior to coming to me she had had a small tumor, about the size of a hazel nut, excised from the base of one of the phalanges, the operation being performed from the dorsal surface of the hand. Six or eight months after I had operated she noticed a number of little kernel-like bodies at the extremities of the metacarpal bones, and these commenced to grow very rapidly, so much so that in fifteen months' time she consented to the removal of all the fingers of the left hand except the middle finger and the thumb. The new growths were enchondromata, and there was no sign of their return.

I should here remark that her hands were particularly well formed and considerably smaller than the average. She was very proud of their size and shape, and in 1885 absolutely refused to allow of an operation unless I would promise to remove the tumor without mutilating or deforming the hand.

After the removal of the enchondromata, however, a strange alteration occurred in the hand; its size greatly increased, it became broad and large, so much so that she kept it carefully concealed from view, and its appearance was to her a source of great unhappiness. No person could be imagined less likely to suffer from acromegaly than this patient. Her features were regular and beautiful, indeed her beauty was such, for she is now dead, that it excited the attention of all who saw her.

Gifted with much more than the average amount of intelligence, she was in every way, physically and psychically, removed from the class that have furnished victims to acromegaly. The condition I found after death was such as, if she had had the same pathological condition in the other hand, would have been described as acromegaly, or at least "chieromegaly." There was no possibility of getting the hand for examination, so I had to be content with a simple inspection.

Since meeting with this case I have never come across anything resembling it; some



such case may have been reported, but I cannot find the record, and I am in doubt whether to include the case under the heading acromegaly or unilateral hypertrophy.—*London Med. Press*, Nov. 11, 1891.

**Bateman (F.) on the Speech Centre.**—The writer's book on this topic having been (in his estimation) erroneously criticised, he replies in his own defence, laying down the following dicta :

1. That, although something may be said in favor of each of the popular theories of the localization of speech, still so many exceptions to each of them have been recorded that they will none of them bear the test of a disinterested and impartial scrutiny.

2. That it must be conceded that in the immense majority of cases aphasia has been found associated with disease in the left anterior lobe, and more especially in the third left frontal convolution or its immediate neighborhood. He believes that the Scotch verdict of not proven may fairly be claimed in reference to any arbitrary and definite localization of the faculty of speech; and that the most there can be conceded is that the healthy action of a limited portion of the left hemisphere seems to be necessary for the *outward* manifestation of articulate language; but this fact does not justify crediting this area with being the *seat of speech*, an expression which seems to him to be misleading and inappropriate.—*N. Y. Med. Jour.*, Nov. 7, 1891.

**Hoyt (F. C.) on Pachymeningitis Hæmorrhagica Interna.**—The writer reports a case, and after a general review of the question sums up as follows :

1. The disease known as pachymeningitis hæmorrhagica interna chronica is not a disease of the dura mater primarily, and not necessarily at all. The name is therefore a misnomer, and the simpler term subdural hæmatoma should be substituted.

2. The condition is due primarily to paralysis or loss of the normal vaso-motor tonus, associated with structural changes in the cerebral vessels, particularly those of the pia mater.

3. Hemorrhage may, and often does, take place in the substance of the dura from the causes stated in this paper, but that its vascular supply and anatomical structure render it improbable that these

hemorrhages play any part in the formation of a sub-dural hæmatoma.

4. The hæmorrhage occurs from the vessels of the pia mater primarily, forces its way without difficulty through the upper web-like layer formerly called the arachnoid, escaping into the subdural space. The extravasated blood becomes organized, new vessels are formed, and these assist in furnishing the recurrent hemorrhages.

5. The inflammation of the internal surface of the dura mater is secondary, and due to the irritation of the extravasation, and then is not general, but occurs only in patches where organic union has taken place.—*Four. Am. Med. Assoc.*, Nov. 7, 1891.

**Bensel (W.) on Aspiration, from the Patient's Standpoint.**—The writer says:—Shortly after the blizzard of a few years ago I contracted a pleurisy, with effusion, from exposure during the storm. The effusion became so large and caused such considerable dyspnoea, dysphagia, and displacement of the heart that it was deemed advisable to aspirate and withdraw some of the fluid. The first needle that was introduced was a small hypodermic-syringe needle, simply for diagnostic purposes. The only thing that I observed at this time was that the pain was much more considerable than I had supposed it would be. Soon afterward another, larger-sized needle was introduced to remove the fluid, and then I noticed that there were two distinct sensations of pain, equal in intensity, but different in character, one as the point of the needle passed through the skin, and the other just before the fluid was reached. The second was precisely the same as the "stitch in the side" felt with a dry pleurisy. A re-accumulation of serum occurring in a few days, a needle was again introduced. Only a small amount of fluid was removed before the lumen became obstructed in some way, and the needle was withdrawn and re-introduced in another situation. A few minutes before each of these two aspirations, a four-per-cent. solution of cocaine was injected hypodermically, so that no pain was felt as the needle passed through the skin. The same degree of pain occurred as before, however, when the needle passed through the pleura. These facts would seem to indicate that the pleura possesses nearly, if not quite, as great sensibility as the skin itself.—*N. Y. Med. Jour.*, Dec. 26, 1891.

### Marcet (W.) on the Effects of the Respiration of Carbonic Acid on Man.

—The writer recently carried out a series of experiments on re-breathing air. Four different persons were subjected to the trial. The results were as follows :

1. On re-breathing air in a closed vessel less carbonic acid is expired in a given time than in ordinary breathing.

2. The persons who emit the most carbonic acid in re-breathed air are those who expire most carbonic acid and air in the same time in ordinary breathing.

3. On re-breathing thirty-five litres of air in a closed vessel for a period of five minutes, the volume of air undergoes a slight reduction.

4. When fresh air is taken into the lungs, immediately after re-breathing air in a closed vessel, the volume of air re-breathed and weights of  $\text{CO}_2$  expired are greater than in ordinary breathing.

5. The effects produced on the chemical phenomena of respiration by re-breathing thirty-five litres of air in a closed vessel during five minutes have passed away in less than six minutes after the breathing of fresh air has been resumed.

The practical application of the foregoing is shown in the following conclusions :

1st. When air containing an excess of  $\text{CO}_2$  is breathed, the gas accumulates rapidly in the blood, and under such a condition the phenomenon of nutrition is more or less interfered with. People working in ill-ventilated rooms and buildings should, towards the preservation of their health, sleep in as pure an atmosphere as possible, where they will rid their blood of the carbonic acid absorbed in the daytime.

2d. The effects produced by inhalation of carbonic acid gas depend greatly on the rapidity of the exposure. The sudden inhalation of air containing a large proportion of the gas may produce rapid insensibility and death, while this same air might have been breathed for some time with a certain degree of impunity had the carbonic acid present been increased gradually.

3d. When life is threatened by the inhalation of carbonic acid, there is no reason to despair of artificial respiration so long as the heart is beating ; the gas will diffuse rapidly from the blood into the air with which the lungs are inflated and thus be carried out of the body.—*The Med. Press*, Oct. 14, 1891.

### Hæmoptysis in Advanced Life.—At

the beginning of last year's session of the Medical Society of London Sir Andrew Clark drew attention to a class of cases of hæmoptysis (sometimes fatal) which was not associated with tubercular lesions, and occurred mostly in elderly people of arthritic tendencies and the subjects of emphysema and arterial degeneration. The paper gave rise to an interesting debate, which showed, however, that experience of this hitherto undescribed condition was not very wide. Dr. G. Busuttill, writing in the *Revista Medica* (of Malta), No. 22, fully confirms Sir A. Clark's observations, and relates three cases of the kind which occurred at the Asylum for the Aged and Infirm, Floriana. The first was the case of a boatman, aged seventy-two, who was admitted for copious hæmoptysis. He had been subject to rheumatism and to asthmatic attacks resulting from emphysema. Astringents had no effect in controlling the hemorrhage, whilst a saline aperient, followed by the prescription of iodide of potassium as recommended by Sir A. Clark, was followed in three days by cessation of the hæmoptysis. The second patient was sixty-six years of age, and he, too, had frequently had attacks of rheumatic arthritis. He was also the subject of chronic bronchitis. Alkalies were administered, and within six days he was free from hæmoptysis and pain. The third case was fatal. It was that of a female who had suffered from osteo-arthritis of the knee for seven years. She had also had syphilis. She was attacked by hæmoptysis, which continued in spite of astringents, but ceased in four days after she had been placed on iodide of potassium in four-grain doses every four hours. Ten days later the hæmoptysis recurred with such severity as to prove fatal within two hours. The post-mortem examination showed cardiac hypertrophy, without valvular lesion, scattered hemorrhages in the anæmic lungs, congested liver, and atrophied kidneys. It must be open to question whether the fatal case above reported really belongs to the category described by Sir A. Clark, for he expressly eliminated an association with arterio-capillary fibrosis. The renal and cardiac changes (so far as can be gathered from the meagre details) in the above case seem to point strongly to its being of the latter class, where the liability to hemorrhage is well known.—Ed. *London Lancet*, Oct. 17, 1891.

**Congenital Tuberculosis.**—An interesting case has recently been reported by Sabouraud of Paris, bearing upon this disputed question. The original paper is not accessible, but its salient features are reported in the *London Lancet*, of Nov. 21, 1891.

On August 5, 1891, there was admitted into the lying-in department of the Hospital of St. Antoine a woman pregnant and at full term. On her admission it was ascertained that there was present a slight induration of both apices, with some softening on the left side. A fortnight previously the patient had exhibited a transient albuminuria. Delivery took place on the day of admission, and recovery proceeded without incident, the patient leaving hospital on August 16th. The pulmonary lesions during this time underwent no change. The child was a female, well formed, and normal in weight, and nothing suggested the presence of any hereditary defect. The placenta was not examined. Five days later the infant became affected with conjunctivitis, which speedily yielded to treatment. On the ninth day the child showed signs of meteorism, with a little diarrhoea. On the tenth day general cyanosis was observable, and auscultation revealed fine râles scattered over the whole of both lungs; no convulsions occurred, but there was a continuation of the diarrhoea. On the morning of the eleventh day the child died without any further developments. Owing to the wishes of the friends, it was only found possible to examine the liver and the spleen post mortem. The liver was normal in color, weight, and dimensions, and free from any trace of perihepatitis, but throughout its entire thickness it was beset with thousands of little granulations from one to two millimetres in diameter and of equal size. The spleen was found small and contracted, without trace of perisplenitis, but with thickened capsule; while it was crowded with innumerable tubercles, some miliary, others from eight to ten millimetres in diameter. The granulations were so numerous that they seemed to occupy the greater part of the surface of the parenchyma of the organ. Microscopic examination by several methods conclusively established the truly tuberculous character of the granulations both in the liver and spleen. The case of the mother made rapid progress, renal complications supervened, and she finally died comatose, with

meningeal symptoms. The necropsy showed that the upper half of each lung was crowded with tubercles. No tubercles were found either in the breasts or in the genital organs.—Ed. *Bost. Med. and Surg. Jour.*, Dec. 14, 1891.

**Brunton (T. Lauder) on Cardiac Pain and Angina.**—the writer believes that the natural indication for relieving the pain at the time is to lower the blood pressure. Nitrite of amyl is the remedy most commonly employed, but the following nitrites are all of service.

(1) Secondary propyl; (2) tertiary butyl; (3) secondary butyl; (4) isobutyl, nearly equal; (5) tertiary amyl; (6) *n*-amyl; (7) *β*-amyl, nearly equal; (8) methyl; (9) butyl; (10) ethyl; (11) propyl.

To prevent a recurrence of the attacks, iodide of potash is undoubtedly our most valuable resource. It may act as a simple eliminant or by causing absorption of the deposits which block the coronary arteries may tend to increase the blood supply to the heart. In cases of fatty degeneration iron and arsenic should also be given. Oertel's method of gently graduated exercise deserves a cautious trial.—*Practitioner*, Nov., 1891.

**Heaton (Geo.) on False Aneurism of the Internal Carotid; Rupture; Death.**—The patient was a male, aged twenty. Ten days before, had a quinsy. Three days before, profuse nasal and oral hemorrhage occurred. Nasal plugging stopped the latter, but it recurred on each of the next two days. The day before he was admitted to hospital there was noticed a swelling over the left parotid region.

On admission the following note was taken: Patient thin and pallid. Lips very anæmic. Pulse fairly strong. Blood is slowly trickling from the left ear and nostrils. There is a large ill-defined swelling on the left side of the face and neck; the swelling extends upwards as high as the zygoma, and backwards into the posterior triangle of the neck. The left ear is pushed outwards by the swelling, and the anterior wall of the external meatus bulges into its cavity. The skin over the swelling is inflamed; the whole swelling pulsates synchronously with the heart's beat. The mouth cannot be opened without much difficulty. The soft palate bulges forwards, especially on the left side, almost touching the root of the tongue. The left tonsil is pushed over towards the right considerably

beyond the middle line. The swelling is soft and fluctuating, the mucous membrane covering it is tense and shining, and it pulsates synchronously with the swelling outside and in an expansile manner with it. No bruit or thrill can be detected in the swelling. All pulsation is arrested by pressure in the left common carotid. The left pupil is contracted, and the subcutaneous arteries, temporal and facial, of the left side of the face and scalp, are abnormally distinct.

A recurrence of the hemorrhage necessitated the ligature of the common carotid. Ten days after, death resulted from another attack of bleeding.

The autopsy showed that the blood had clotted in the ligated vessel in a normal manner. Behind the angle of the jaw the tissues around the internal carotid were much infiltrated with blood, and the tonsillar region much broken up. The finger could be passed into the cavity of the naso-pharynx. On dissecting out the internal carotid artery, it was found to be slightly dilated just before it entered the skull, and through the internal side the artery had ruptured. The ruptured end looked somewhat acutely inflamed. The sheath also was inflamed for an inch below this. There was no evidence of any bone or ear disease. The other organs were natural.

The writer's explanation of the case is that an abscess formed outside its walls during an attack of tonsillitis, which, instead of bursting into the naso-pharynx, made its way into the artery. A false aneurism thus formed, which eventually burst into the naso-pharynx.—*Birmingham Med. Jour.*, Nov., 1891.

**Foxwell (A.) on the Condition of the Heart in Debility.**—In his thesis the author lays down the following principles :

1. The apex beat is placed upwards and outwards, rarely downwards. Its impulse is feeble, sudden, and diffused. There is another evident impulse in the second and third left spaces especially, sometimes the first and fourth. It spreads from above downward, and from right to left with rapid vermicular movement, starting in each space close to the sternum, and in the fourth occasionally seen to the right of the bone. In rhythm it is entirely systolic, or, rather it is one continuous movement occupying the whole period of the auricular and ventricular contractions.

2. *The area of the superficial cardiac dulness* is in debility characteristic, and is the most valuable of all the signs which enable us to diagnose debility from organic disease. Taking the normal area of the heart's dulness to be the triangle made by the left edge of the sternum from the upper border of the fourth cartilage to the sixth, and by lines joining the extremities of this one to the apex beat in the fifth space at a point midway between the parasternal and nipple lines, then the similarly dull area in a typical debilitated heart would be an irregular figure made by joining the following points by lines slightly curved outwards (D, E, F, G, H, Fig. 1)—viz., D, at the lower border of the second left cartilage half an inch to the left of the sternum ; E, a point over the third cartilage one and a half inches from the left edge of the sternum ; F, the apex beat in the nipple line and fourth space ; G, the right edge of the sternum at the upper border of the sixth cartilage ; and H, a point in the right fourth space half an inch to the right of the sternum.

3. *Systolic murmurs are often present.*—These are produced at three points, in this order of frequency—viz., the pulmonary artery, the tricuspid valve, and the mitral valve. Their rhythm is always systolic.

The chief fundamental conditions underlying these facts are as follows : The left ventricle is little, if at all, enlarged. Debility affects the whole body as well as the heart muscle, but there is no evidence to show that the feeble left ventricle is unable to supply the diminished wants of the feebly acting body. Secondly, should the left ventricle, from any particular cause, be unable to send on all the blood delivered to it by the right ventricle, there is no necessity here for enlargement ; it may simply adjust matters by but partially emptying itself and then refusing to admit all the blood from the lungs, for the wants of the debilitated body are not imperious, and will not clamor for their due quantity of blood, but will weak-heartedly content themselves with a smaller amount, and so lead to further anæmia. The next fundamental condition is this : The right ventricle in debility nearly always becomes enlarged. The reasons for this are not far to seek. In debility continuous work tires the body as a whole, and the heart is subject to no particular liability to fail, for the

debilitated body is incapable of prolonged exertion of any kind. But the condition in *sudden* exertion is very different. In exercise the initial strain falls on the right ventricle; the first need created is far more rapid oxidation of the blood, and the labor of producing this oxidation is the right ventricle's; should it, through debility, fail in complying with a *sudden* demand for extra labor, dyspnoea is induced, the individual abandons his task, and the rest of his body, including the left ventricle, is saved the undue strain by the failure of the right ventricle, which thus acts as a buffer to the left. Even if the *left* ventricle fails, the right again becomes the scapegoat.

These statements granted, it is easy to explain (1) the position of the apex beat. The aortic valves may be regarded as the fulcrum of the heart. If the left ventricle does not enlarge, it is evident that its apex must move in the arc of a circle of which the aortic valves form the centre—that is, either down and to the right, or up and to the left. In debility the enlargement of the right ventricle naturally pushes the apex to the left, and therefore up, so as to obtain more room for its apical portion between the left ventricle and the liver. (2) The peculiar dullness is due to a dilatation of the right ventricle unaccompanied by a corresponding increase in size of the left. Hence the right ventricle's dilatation takes place chiefly in the upward direction, as it is here freest from the restraining influence of the stout left ventricular walls.

3. *The murmurs.*—The pulmonary results from the change in shape and position of the pulmonary artery. The valves are carried upward till they are over the bifurcation of the vessel, approximating the latter.

The murmurs result from the altered relations of the valves to the vessels and heart cavities, and the enlargement of the latter with the weakening of the valvular rings.

The mitral murmur is by far the least common of the three.—*Birmingham Med. Jour.*, Nov., 1891.

**Fenwick (W. S.) on the Heart in Chronic Phthisis.**—As a rule the organ is small and sometimes adhesions exist between the layers of the pericardium. In about 11 per cent. the heart muscle is "soft and fatty," more generally being "pale but healthy." Tubercular deposits have never been observed by the writer.

The organ as a whole is partially or completely relaxed. The coagula may be the simple post-mortem ones, or we may have a mass of jelly-like consistency, whitish-green in color, and composed of a uniform meshwork of fibrin, replete with serum, and entangling in its structure numerous blood cells. A third variety of clot is of earlier and more gradual formation, and consists of a moderate quantity of grayish-white laminated fibrin, situated usually in the apex of the ventricle or in the auricular appendix. This leathery deposit seldom occupies more than a third of the contents of the cavity, but is apt to conceal itself among the interstices of the *columna carnea*, coiling itself around the *musculi papillares*, and often so firmly adherent to the wall of the ventricle as to necessitate its removal with a scalpel. Valvular disease is found in about 12 per cent. of the cases, though valvular disease is usually stated to be strongly antagonistic to the development of pulmonary tuberculosis.

Among the series of cases there occurred four in which some congenital malformation of the heart was associated with phthisis; in three there existed a patent condition of the *foramen ovale*, while in the fourth the right ventricle was found to be subdivided by an oblique septum, the pulmonary artery arising from the upper chamber thus formed. Double phthisis was present in each case, and ran a fairly rapid course. It would appear from the writings of Peacock, Lebert, and others, that cases of congenitally malformed heart are very prone to die of tuberculosis, and that about one third of the cases of pulmonary stenosis, with or without defects in the ventricular septum, succumb to this complication.

**Aneurism.**—According to Rokitansky all aneurisms in the vicinity of the heart afford complete protection against tuberculosis, owing to the resistance they offer to the complete emptying of the left ventricle and to the influx of blood into the right. This statement was opposed by Graves and many other clinicians, who asserted that, so far from being exempt from the disease, cases of aneurism are particularly prone to become affected with tuberculosis. According to Puller nearly 7 per cent. of all cases of aneurism exhibit some signs of pulmonary phthisis. The truth, however, appears to lie between these two extremes, for although tuberculosis is by no means a

common accompaniment of *aneurism*, the two diseases are, nevertheless, occasionally associated in the same individual. Among the post mortem records of the Brompton Hospital there are twenty-four cases in which a thoracic aneurism was proved to exist, and in these tubercle presented itself seven times.—*Practitioner*, Nov., 1891.

**Whitwell (J. R.) on the Pulse in Stupor.**—After a study of the question, the author comes to the following conclusions :

**Summary.**—1. In cases of intermittent stupor, during the stage of stupidity, the vessels are in a state of tonic contraction, producing a condition of high tension. 2. A portion of this spasm may be removed by amyl nitrite. 3. This spasmodic condition is completely removed when the stage of lucidity occurs, giving place to a stage of lowered tension either as a causative, concomitant, or resultant in relation to the changed mental state. 4. This change is constant in its occurrence. 5. Strict parallelism occurs between the mental and pulse condition, as shown by sphygmographic tracings taken during the transition period. 6. Considering the changes in the pulse in this disease, and the fact that a stenosis of the vessels at the base of the brain can be frequently shown *post mortem* to be present, it is possible that this physical impediment to the blood supply of the brain may be sufficient to account for this form of mental disease, and thus warrant the establishment of it as a mental disease with a name indicating its pathology approximately.

The original article is illustrated with sphygmograms.—*London Lancet*, Dec. 17, 1891.

**Leahy on Unusual Heart Symptoms Following an Injury.**—A young farmer, trampled on by a team of horses, was seen shortly after. He was conscious, but quiet, and in some shock. A rhythmical sound was audible to one standing by, synchronous with the first sound of the heart, and heard at least six feet away. When the patient changed from the dorsal to side position it disappeared, but came again on the patient resuming the dorsal decubitus. The heart apex beat was displaced downwards and to the right, being almost under the edge of the sternum. There was no difficulty of respiration, or acceleration of pulse, and he said the only discomfort he felt in the chest was the beating feeling, and a sort of

slight nausea. On placing the hand over the apex there was a sort of thrill communicated to it at every beat, something resembling the sensation caused by squeezing a portion of healthy lung between the finger and thumb. The sound was most peculiar, and changed slightly from time to time. Sometimes it was like a whirr of a bird's wing in flight, at others it resembled the creaking of a new saddle, and at others the gurgling of fluid on being poured out of a bottle, and all the while the patient was on his back the noise continued with every beat of the heart. The patient made a good recovery, the noise gradually becoming less marked. It was found later that it could be stopped at once by firm pressure over the apex even while the patient was on his back. There was considerable increase of præcordial dulness. There could have been no pleurisy, as there was complete absence of dulness all over pleura, of dyspnœa, and of pain. There could have been no pericardial effusion either, as there was no distress or dyspnœa, no muffling of the cardiac sounds, and only moderate increase of area of dulness. The percussion notes were natural all over the chest, except some increase of area of præcordial dulness in the downward and right lateral directions. No explanation is offered of the phenomenon.—*New Zealand Med. Jour.*, Oct., 1891.

**Maude (A.) on Œdema in Graves' Disease.**—Dropsy in this disease has three varieties.

1. *Œdema of cardiac origin.* These cases have no character distinguishing them from those of ordinary cardiac dropsy as presented in mitral disease. In fact they may be due to the latter coexisting with Graves' disease. Organic valvular disease is, however, a comparatively rare accompaniment of this disorder, and the commoner cardiac lesion producing dropsy is dilatation with mitral insufficiency and feeble ventricular action (asystole).

We must bear in mind, moreover, the fact that dilatation of the heart in Graves' disease need not be a gradual process secondary to muscular enfeeblement of the walls, but may be a sudden active condition of nervous origin. And, as Dr. West points out, dilatation of this sort may account for those mysterious cases of sudden death in the disease which are not infrequent.

Obviously œdema of cardiac origin may

be progressive, become general, and extend to the serous cavities or the lungs.

2. *Œdema of nervous origin.*—In a far more numerous class of cases we find a slight anasarca of the insteps and lower legs, which does not tend to increase. Though it may show itself from time to time for years, it is transient, appearing usually at the close of day, and disappearing with the maintenance of the recumbent position. This condition may be found without any signs of cardiac dilatation—in fact, when the heart is hypertrophied and acting with considerable force. If, however, the œdema tends to extend up the legs, the condition of the heart should be carefully investigated. For dropsy, which has been at first nervous in origin, the characteristic dropsy of Graves' disease, may be perpetuated and extended by cardiac disability.

3. *Transitory œdema.*—The rarest class is that of irregular, fugitive, unsymmetrical dropsies. Puffy swelling appears in various parts of the face, neck, arms, and hands; the cheeks and eyelids are favorite positions, while both limbs of one side of the body may be affected.

This form of œdema is very transitory—in fact may only last a few hours.

Swelling of the eyelids has also been described. It affects the upper lids chiefly; it is not a true œdema; no pitting follows pressure, and it does not cause the closure of the lids which is produced by ordinary œdema—in fact, it may be present with retraction of the lids. There is generally an injected condition of the small veins with it. The swelling may accompany proptosis, but has no relation to it, for M. Parinaud found it present in two patients who had neither goitre nor exophthalmos, and in my case the eyes have never been prominent. Two cases are on record of a transitory swelling of joints, an "intermittent hydrarthrosis."

In distinguishing these various forms of swelling we must be guided by the position and degree. If situated only on the face and upper limbs, or if unsymmetrical, it is certainly of nervous origin, and it may be so if it affects the feet, but it is only slight and evanescent. In all cases of course the heart and urine should be carefully examined; for the occurrence of œdema due to dilatation of the heart is a serious symptom. There is little to be said about treatment. When merely local the ordi-

nary means of rest and position will be sufficient. If it be due to cardiac conditions digitalis should be used freely.—*Practitioner*, Dec., 1891.

Ord (W.M.) on Cardiac Symptoms in Gastric Ulcer.—In a recent paper the following points were laid down by the writer: (1) the extension of the cardiac dulness upwards on the left side of sternum; (2) the shifting of the impulse to the left and somewhat upwards; (3) the change in the quality and distribution of the impulse; (4) the occurrence of friction sounds, more particularly on the upper part of the dull area; (5) the existence of a mitral systolic murmur, conducted into the axilla, with accentuation of the second sound over the pulmonic area. This condition of the heart would, under ordinary circumstances, be held to point to endo- and peri-carditis, but no pyrexia was ever observed. He discussed the possible causes of the symptoms alluded to, pointing out what an important factor anæmia was when considering cardiac murmurs. Moreover, as alternative hypotheses, he suggested the increased tension in the pulmonary artery as a result of the nerve disturbance of anæmia, or dilatation, especially of the right side of the heart. This, however, would not explain the upward extension of the dulness. He proposed for consideration the question whether the gastric ulcer and the cardiac changes might not be the common result of a disturbance of the vagus. He remarked that in the class of cases under consideration functional disorders in the area of distribution of the pneumogastric nerve were undoubtedly common. No opportunity had ever offered itself of making a *post-mortem* examination of any of the patients observed.—*Brit. Med. Jour.*, Dec. 12, 1891.

Forchheimer (E.) on Etiology of Stomatitis Aphthosa.

1. It is a disease produced by some form of deleterious material in the circulation.

2. This material may have its origin in various processes, bacterial or otherwise.

3. It may therefore be of various kinds.

4. This material acts upon a nerve or nerves, or upon a nerve centre or nerve centres.

5. It produces an herpetic eruption that is the aphthous process.—*Phil. Med. News*, Nov. 28, 1891.

**Anders (J. H.) on Catarrhal Dyspepsia.**—The points on which to base the diagnosis of the catarrhal form of dyspepsia are: The constancy of the symptoms, as against the irregular manifestations of the functional form. Then we have the tongue furred, as a rule, in catarrhal dyspepsia, with red tip edges and *enlarged papillæ*. We have in catarrhal dyspepsia a great deal of acidity. In functional dyspepsia you are more apt to have eructations of gas, along with brackish water, though sometimes there is also more or less acidity. In cases of catarrhal dyspepsia, we sometimes have a great deal of thirst. This is not always present, however. There is also a great deal of headache, and the general health and strength are more affected in the catarrhal than in the atonic form. The loss of strength goes on continually.

The diagnosis in these cases is highly important, from the fact that the treatment is widely different. In the functional form you must build up the strength of the patient, build up the nervous muscular elements of the stomach, and assist gastric secretion. In the catarrhal form the treatment is entirely different. First, rid the alimentary canal of all undigested matter, of all secretions, and then give the stomach as much rest as possible. In order to do that the patient should be placed on milk or liquid diet for a couple of weeks. If the patient says milk does not agree with him, it may be pancreatinized or peptonized, or it may be boiled. These patients, when they suffer from thirst, should have diluents. The best thing to use for this purpose is some sort of gum water or mucilaginous drink.

In such a case the writer recommends restriction to liquids, animal broths, and milk, every two or three hours regularly. The patient may have sub-nitrate of bismuth, gr. x., and bi-carbonate of soda, gr. v., to overcome the acidity, combining with this five grains of pepsin. This powder to be taken before meals. Another highly important thing in catarrhal dyspepsia is to keep the bowels soluble, and the best preparations for this purpose are the salines: Rochelle or Carlsbad salts, giving a heaping teaspoonful of either, preferably in warm water, early in the morning. Salines should always be taken fasting, early in the morning. If a teaspoonful is not sufficient to produce an evacuation in two

hours, increase the dose.—*Times and Register*, Nov. 7, 1891.

**Kirk (D. A.) on Intestinal Obstruction from a Foreign Body; Laparotomy; Death.**—A boy, aged fourteen, was seen suffering from symptoms of cholera morbus, and was relieved by the usual remedies. Five days later the bowels had not moved, and symptoms of intestinal obstruction were evident. Flushing the colon failed of relief, and an operation was undertaken, under very unfavorable circumstances. The cause of the obstruction was found to be a mass, four and one half inches in circumference. It lay deep in the iliac fossa, and could not be detected before the operation. The boy had been in the habit for years of chewing and swallowing grass, hay, slippery-elm bark, etc., and the mass must have been several years in accumulating. Why it did not cause earlier symptoms is a mystery. The author's theory as to how it formed is this; one of these indigestible substances named having been swallowed, it was carried along the alimentary canal until it reached the region of the ileo-cæcal valve, where it lodged and was straightened out by the vermicular motion of the bowels, the first one forming a nucleus for the mass, as it was noticed that all, or the majority, of the fibres ran parallel. But how the patient was able to have a normal evacuation of the bowels, as he claimed to have had previous to his illness, with such a large obstruction of the bowel is more than the writer is able to understand. Patient suffered no inconvenience and was apparently in a healthy condition until about two days previous to the first visit.—*Northwestern Lancet*, Dec. 15, 1891.

**Languel (H. G.) on Imperforate Anus: Inguinal Colotomy.**—Patient was two days old, and in good general condition otherwise. Abdomen was full, but not tense. Intergluteal fold was well marked up to posterior aspect of scrotum, but no anal depression existed. An incision to the depth of one and one quarter inches was made at the anal site, but no gut could be felt. It was then decided to perform inguinal colotomy. An oblique incision was made in the left iliac region, half an inch above Poupart's ligament, commencing at the level of the anterior superior spine, and passing downwards and inwards for about an inch. On opening the peritoneal cavity about 3 vj. of a clear



yellow odorless fluid escaped. A portion of the sigmoid flexure of the colon presented at the opening, and was readily recognized by the longitudinal bands of muscular fibres upon it. It was much distended, and of a dark green color. The gut was then secured to the edges of the abdominal wound by eight silk sutures, which were passed through the entire thickness of the intestinal wall, and it was then opened by a longitudinal incision  $\frac{1}{2}$  inch in length. A very large amount of meconium escaped. A number of horse-hair sutures were then inserted between the silk ones, and the wound was then dressed with absorbent wool. The child seemed to stand the operation well, but died on the sixth day after.

The autopsy showed the stomach enormously dilated, reaching to the fundus of the bladder and the right iliac crest. The opening into the bowel was found to be five inches above its termination, which was immediately behind the neck of the bladder. Section of the gut showed it to end quite blindly.—*Edinburgh Med. Jour.*, Nov., 1891.

**Rees (O. C.) on Septic Peritonitis from Fish Bone Penetrating Wall of Stomach.**—The patient, a man aged thirty-five, complained for six weeks before admission to the hospital of intense lancinating pain in the epigastric and umbilical regions. It began suddenly, without any apparent cause, was constant, and increased by eating, any sudden movement, or pressure. No other symptoms were present at its onset. The abdomen soon began to swell, and to grow very painful. He rapidly emaciated. He suffered from constipation only when liquid food was taken. The pain gradually spread over the abdomen. Soon after admission he collapsed and died. At post-mortem the following was noted :

The abdomen was found to be filled with a purulent fluid, greenish in color. The omentum was in a hard mass, almost black in color, and lying anterior to the transverse colon. There were extensive adhesions between all the abdominal viscera. The inflammatory process and the adhesions caused thereby were so marked that they had formed constrictions of the transverse colon, and small intestines. In the fluid contained in peritoneal cavity were numerous fibrinous flakes, a number of which had become attached to peritoneal

covering of the intestines and stomach. On opening the stomach it was found to contain several ounces of purulent fluid.

Near the pyloric orifice on the greater curvature was a fish bone, which had penetrated the walls of the stomach, and was lying in an opening about the size of a goose-quill. For some distance around this opening the mucous membrane of the stomach was very dark. On the peritoneal cavity the inflammatory process had formed adhesions between the stomach, transverse colon, and meso-colon, shutting off a pouch that would hold about one ounce. One end of the bone was lying in this cavity. A fistulous opening led into the peritoneal cavity from this pouch, thereby allowing free passage of all liquids and small particles of food from the stomach into the abdomen. The pyloric end of stomach was so constricted that it would not allow of the passage of more than a finger.—*No. Am. Pract.*, Dec., 1891.

**Delafield (F.) on a New Classification of Kidney Diseases.**—Delafield believes that the group of kidney lesions popularly known as Bright's Disease is best subdivided along the following lines :

There are three morbid processes which take place in the kidneys—congestion, degeneration, and inflammation—which produce definite anatomical changes, cause regular clinical symptoms, and call for appropriate methods of treatment. *Congestion*, whether acute or chronic, produces an accumulation of blood in the veins and capillaries of the parts affected, causes local symptoms and disturbances of functions, and is to be relieved by means addressed to the circulation of the blood. *Degeneration*, whether acute or chronic, produces changes, more or less profound, in the parts affected ; it is caused by poisons, by disturbances of circulation, and by other diseases ; it produces disturbances of functions according to its severity ; it may be itself a cause of inflammation, and can be but little affected by any treatment. *Inflammation* is attended with three essential features, which may occur separately or together—an escape of the elements of the blood from the vessels, a formation of new tissue, and a death of tissue—being respectively exudative, productive, and necrotic.

Exudative inflammation is of short duration, leaving no permanent changes, and being favorably affected by treatment.

Productive inflammation runs an acute, subacute, or chronic course, effecting permanent changes in the inflamed parts. There is much variety as to the relative quality of exudation and of new tissue. Treatment is not very satisfactory.

The more important divisions of Delafield's classification are the inflammations of the kidney. He divides these into (*a*) acute exudative nephritis; (*b*) acute productive or diffuse nephritis; (*c*) chronic productive or diffuse nephritis with exudation; (*d*) chronic productive or diffuse nephritis without exudation; suppurative nephritis; tubercular nephritis.—*Univers. Med. Mag.*, Nov., 1891.

**Long (J. W.) on Albuminuria in its Relations to Surgical Operations.**—The writer draws the following conclusions:

1. That it is very rare for either ether or chloroform to injure healthy kidneys.
2. That when renal disturbances from the use of an anæsthetic, the kidneys being healthy, do occur, they are due rather to prolonged narcosis, exposure of the patient, or perhaps to the combined influences of the operation and anæsthetic.
3. That a mild degree of albuminuria or nephritis, especially if recent, is not a contra-indication to the use of chloroform or ether.
4. That even in the presence of advanced and extensive renal changes an anæsthetic may be employed, provided the patient or family were advised of the additional risk.
5. That of the two anæsthetics usually employed, it is yet a mooted question as to which is the safer, so far as the kidneys are concerned, unless it is in obstetrical operations.
6. That, while it is by no means the rule, profound functional disturbance, and even organic lesions, may be induced by an operation, apart from the influence of the anæsthetic.
7. That such renal changes are due to reflex sympathetic action or sepsis or both.
8. That operations on certain parts, notably the abdominal and genito-urinary organs and about the mouth and rectum, are specially likely to produce renal complications.
9. That a healthy condition of the kidneys minimizes, but does not obviate, the dangers referred to.

10. That albuminuria is always indicative of renal lesions, and should be regarded with distrust, but is not a positive contra-indication to an operation.

11. That when albuminuria is associated with other evidences of advanced renal changes no operation should be undertaken without first candidly stating to the patient or friends the dangers incident to the condition of the kidneys.

12. That, paradoxical as it may seem, an operation will sometimes relieve an albuminuria due to acute affections.

13. That no surgeon is justified in undertaking an operation without first knowing the state of his patient's kidneys.—*N. Y. Med. Jour.*, Dec. 26, 1891.

**Lancaster on Uræmic Eruption of the Skin.**—The object of the paper is to draw attention to certain peculiar states of the skin associated with an uræmic condition of the blood. The eruption, which occurs principally in cases of chronic interstitial nephritis, first appears as maculæ and papulæ of a bright red color upon the extensor surfaces of the hands, forearms, and legs, and then rapidly spreads over the whole body. In a few days one of three changes occur in the rash: 1. It gradually subsides, with extremely free desquamation, leaving the underlying skin brawny and thickened. 2. It becomes eczematous, with free exudation of a gummy fluid, which dries and forms scabs and crusts. 3. In the severer cases pustulation or even the formation of small abscesses follows the eczematous stage. Severe itching usually accompanies all stages of the rash. The eruption is generally of grave prognostic significance; in seven out of the eight cases it was followed by death within five weeks from its first outbreak. An abstract of those cases in which this eruption had been seen, was read, and the microscopical appearances of the diseased skin detailed. In considering the etiology of the eruption its analogy with skin rashes due to pyæmia, ptomaines, and drugs was pointed out, and the suggestion made that the uræmic eruption was a tropho-neurosis, due to the presence of one or more toxic principles circulating in the blood, which the diseased kidneys had failed to excrete.—*London Med. Press*, Nov. 18, 1891.

**Albarran (P.) on Cystitis due to Cantharides.**—The following case was recently reported in one of the Spanish

journals : The patient was a gentleman who was suffering from a severe affection of the lungs, for which it was decided, at a consultation of several medical men, to apply an extensive blister over the right side of the back of the thorax by means of blistering fluid. A few hours afterwards the symptoms of cantharides-cystitis presented themselves with considerable severity. Monobromide of camphor was given by the mouth, and enemata containing camphor, also some other remedies, but without effect. A hypodermic injection of morphia was therefore administered, and this quieted the patient and enabled him to sleep. A few days afterwards, as it was considered absolutely necessary to renew the blistering, a Beslier's blister was employed, the surface being covered with a layer of camphor. This produced, however, the most agonizing pain and tenesmus in the bladder and rectum, which, in spite of all manner of remedies, including hypodermic injections of morphia, lasted for nine hours with scarcely any alleviation. The patient was then covered with sweat, groaning incessantly, and in a state of great prostration. After a consultation fifteen drops of a 1 per cent. solution of hydrochlorate of cocaine were introduced by means of a suitable instrument into the prostatic portion of the urethra and the neck of the bladder. In one minute the pain ceased as if by a charm, and the patient slept for two hours and a half. The pain began to come on again an hour after he awoke, and so ten drops of the solution were introduced as before. This arrested the pain in three minutes, and it did not return. The urine, which had contained albumen and blood, became normal in a couple of days. This observation tends to throw doubt on the supposed virtue of camphor in preventing or curing cystitis in a patient who is being blistered by cantharides, and shows how extremely valuable cocaine may prove

under such circumstances.—*London Lancet*, Dec. 12, 1891.

**Van Hook and Dodds on Dermoid Cyst of the Testis.**—G. N., aged twenty-one years, had at four some trouble with the urinary apparatus requiring catheter. At seven he noticed enlargement of left testicle, which was tender on pressure. In July, 1891, was kicked in testicle by a horse, causing acute inflammation. An abscess later formed, which was opened, and discharged four ounces of pus. A fistula persisted and the whole testicular mass (left side) was removed. Union by first intention followed. The mass removed was ellipsoid in shape, eight cm. long and five wide. A deep incision through the entire specimen showed, above and behind, the epididymis; and below the more anterior portion of the epididymis, the flattened atrophied remains of the testicle itself. The chief part, therefore of the specimen was the cyst, which evidently had its origin beneath the tunica vaginalis in the testis itself, and not, as sometimes occurs, in the epididymis or the tunica vaginalis. The wall of the cyst was of about the thickness of the skin on the less exposed surfaces of the body. A well-marked epidermal lining was turned toward the contents of the cyst, which were as follows: First, a large mass of sebaceous matter filled the right half of the cyst-cavity, and in this were embedded a large piece of loose cartilage and a small piece of a maxillary alveolar process containing a perfectly developed bicuspid tooth. Second, a quantity of straight blonde hair occupied the left side of the cyst-cavity, some of the hairs being still attached to the cyst wall. Matting the hair closely together was a mass of sebaceous matter showing glistening cholesterine crystals. Besides these inclusions a thick emulsion-like fluid occupied the cyst-cavity. Twenty-three other similar cases are on record.—*Chicago Med. Recorder*, Dec., 1891.

## BOOK NOTICES.

**Leprosy.**—By George Thin, M.D. 12mo, pp. 281. Percival & Co., London, 1891.

The object of this book, according to the author, is to systematize, for the convenience of the medical profession, the knowledge which has been acquired up to the present time relating to the bacillus lepræ, its relation to the pathological changes peculiar to leprosy, and its important bearings on the etiology of the disease. This the author has well done, and to further render the work useful as an

epitome of the most important and suggestive information which has been accumulated regarding the disease, he has prepared a summary of its history and geographical distribution. The geographical map accompanying the book sets before the reader very clearly and accurately the distribution of the disease. It is to be regretted that the author, who writes so clearly and distinctly, does not go more thoroughly into the symptoms, diagnosis and treatment of the disease.

The information obtained from the chapters on this portion of the consideration of leprosy will be of little use to either the student, the physician, or the patient, the chapter on treatment being far from up to date.

C. W. C.

#### Circumcision. Remondino.

The author deals at length on the origin of circumcision, its early history, the practices regarding sexual intercourse, miracles attributed to the holy prepuce, emasculation, castration, eunuchism, hermaphroditism, hypospadias, and its religious significance to the Jews—all of which is written in a readable manner, and with such painstaking details that it would make the fortune of the author could it be incorporated in a romance and sold broadcast.

The chapters on the benefit of circumcision and the dangers of the prepuce contain a great many facts and valuable suggestions, which have a moral as well as hygienic bearing, as any physician with a large venereal practice among Jews and Christians will affirm.

The real weakness of the book is in the last chapter, in which he treats too briefly the surgical operations, and shows lack of antiseptic detail. It is a volume, nevertheless, that any physician could read with advantage.

B. E. V.

#### Essentials of Nervous Diseases and Insanity.

—By John C. Shaw, M.D. Saunders' Question Compend, Philadelphia, 1892.

In the author's language, "this little book is to be used as a primer for advanced students." A list of references appended to a description of various diseases is a rather novel but commendable feature.

The use of electricity in the diagnosis and prognosis of peripheral paralyses seems to have been entirely ignored.

It is, however, unusual to find so much practical information condensed in so small and readable a volume.

W. M. L.

#### A Treatise on Practical Anatomy for Students of Anatomy and Surgery.—By Henry C. Brenning, M.D., Lecturer on Anatomy and Surgery in the Philadelphia School of Anatomy, Demonstrator of Anatomy in the Medico-Chirurgical College, etc., etc.

Unless it be to advertise the Philadelphia School of Anatomy, we can conceive no reason why such a work as Dr. Brenning's should be placed upon the market. It contains nothing that is not more ably presented elsewhere. As a book of reference for students or practitioners, it is woefully incomplete; its arrangement is slipshod, and its illustrations decidedly poor. Its English is undoubtedly original, but of a type that we hope few teachers will be found to commend to their students. We are told of the frontal bone, that "passing down *midway*, dividing the bone into *halves*, is the frontal suture," its "superior border is strongly indented and toothed," "the ridges terminate externally in well-marked *processes* of bone, which are serrated for articulation with the frontal *process* of the malar"; of the uterus, that it *sits* in the upper portion of the vagina.

G. K.

#### Visiting List for 1892.—P. Blakiston, Son, & Co., Philadelphia.

The list has space for about thirty daily patients, and is packed full of useful information, together with usual pages for addresses, memoranda, etc. Among the many visiting lists to choose from, we unhesitatingly commend this one.

#### 3,000 Questions for Medical Students: Arranged for Self-examination.—Philadelphia, P. Blakiston, Son, & Co.

These questions cover all the branches of medical teaching outside the specialties. After each question is a book and page reference to some standard authority for an answer. It will doubtless find a large patronage among the students of all our colleges.

#### Saunders' Pocket Medical Formulary.

In this interleaved work of 250 numbered pages, are crowded countless prescriptions arranged under alphabetical headings of diseases. To each one is appended the name of the original compounder. The use of formularies of this class is always somewhat perilous, but for the mature mind, a reference to its pages may furnish an occasional new idea. Price, interleaved, \$1.75. Philadelphia, A. B. Saunders.

#### A B C of the Swedish System of Educational Gymnastics.—By Hartorg Nissen. Pp. 107. Philadelphia, F. A. Davis, 1891.

This is intended as a practical handbook for teachers and for home use. In the form of questions and answers, the various features of the Swedish system are made clear, and by means of the copious illustrations, every point is brought out in full detail. It is the simplest work of the kind we have yet seen, and is an admirable introduction to the larger works on the same topic.

#### Age of the Domestic Animals.—By Rush Shippen Huidekoper, M.D., American Veterinary College, N. Y., etc. Philadelphia, F. A. Davis, 1891.

This work is intended especially for veterinarians, and is a complete treatise on the dentition of the various domestic animals. The literature of various languages has been freely drawn on, and the extensive experience of the writer makes the volume a masterpiece in its line. There are, perhaps, very few men as fully equipped and as thoroughly qualified as Dr. Huidekoper for giving to those interested in the subject a work so complete and trustworthy as this one.

#### A Manual of Venereal Diseases.—By Everett M. Culver, M.D., and James R. Hayden, M.D. Pp. 294. Lea Brothers, 1891.

The authors have undertaken to present in a condensed form all the needful information about chancroid, gonorrhœa, and syphilis. Dr. Culver writes on the two former topics, and Dr. Hayden on the latter. The subjects are treated purely from the practical side, and the large experience of both authors in the treatment of this class of maladies, entitles their views to a careful consideration. It is to be regretted that a few careless errors in prescription writing have crept in to mar the general excellence of the work. We use this latter term advisedly, for probably no American work at least contains so much useful information in regard to venereal diseases in such a compact form as does this one. In such a manual as this one does not expect to find much that is novel, but the most modern phases of the topics are mentioned, and the work, as a whole, can be said to be fully abreast of the times. Especial attention is given to the examination of the urine in acute and chronic urethritis, a point regarding which the average practitioner thinks and knows very little. For the general treatment of syphilis, the proto-iodide and tannate of mercury are recommended as preferable.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## RECENT FRENCH CONTRIBUTIONS TO MEDICINE.

**Brasseur (J.) on Interstitial Injections of Creosote in Cervical Metritis.**—An ordinary Pravaz syringe is used with a sufficiently long needle to reach the neck of the uterus. The membrane is cleansed of its secretions by means of carbolized cotton. Then the injections are made (at two or three different points to the depth of from two to five millimetres) of a quarter of a syringeful for each spot of a mixture containing equal parts of pure creosote, alcohol, and glycerine. Only one of the everted cervical lips is injected at one treatment. Generally the patient soon experiences the taste of the creosote, with a subjective warmth and gentle perspiration; but these effects are never marked. At the site of the injection superficial eschars are formed. Rarely do the latter penetrate deeply. The sloughs are at first gray in color, then black, and they promptly separate, leaving a discharging mucous surface. Following the application an application is made of a powder composed of tannin, iodoform, and salol.

Under the influence of the creosote there is a rapid disappearance of all functional disturbance. The pains gradually disappear. The discharge gradually lessens and finally ceases. After the cauterization scarifications are made to evacuate the contents of the free glands or cysts and to lessen the congestion of the parts. For this purpose a bistoury is used followed by an antiseptic douche and the application of antiseptic cotton tampons.

The aseptic condition of the parts is effected by insufflating every two days the foregoing powder and then applying tampons. These are removed when a renewal of the powder is necessary. In this way a

cicatrizization is obtained much more rapidly than with injections, and absolute repose of the organs is ensured. The treatment is suspended only during the menstrual epoch.—*Gazette Médicale de Liège*, Dec. 31, 1891.

**Lion (G.) on Tuberculous Endocarditis.**—The author admits that this affection does not often afford any evidence of its existence during life. The stethoscope does not reveal it. But carefully conducted autopsies will show that it is by no means rare among patients dying of phthisis.

Lion calls attention to the writings of others in this field. Perroud has shown that the condition is not at all rare among children who die of tubercular meningitis. In general it is more common when the tubercular process runs a rapid course. The lesions are most commonly found on the mitral valve, and take the form of strings or lines of vegetations, which appear to be made up of a large number of miliary tubercles. They run along the valvular edges, and exactly approximate when the valves close. At other times the lesions are more discrete and appear as a granular mass at one point of the valve, or as three or four masses with a healthy base between.

When these vegetations are submitted to the microscope they appear to be formed (1) by a thickening of the sub-endothelial layer which presents a mass of round cells; (2) by a peripheral zone composed of bands of granular tissue mixed in with more or less fibro-connective tissue which follows all the clefts and notches of the surface. The mass of cells in the deeper layers recall the aspect, somewhat, of embryonal tubercle, without the giant cells.

In regard to the bacilli we may or may not be able to find the germs of Koch. There

are cases of tubercular endocarditis from secondary infection characterized by the presence in the vegetations of all sorts of germs, among which the streptococcus is prominent. There are other cases which are of undoubtedly tubercular origin, as is proven by the discovery of the bacillus in which the latter is present at some times and absent at others.—*La France Médicale*, Jan. 8, 1892.

**On the Toxic Symptoms From Phenacetin.**—These follow the same general type that characterizes all of the coal-tar products. Profuse sweating, epigastric pains, nausea, vomiting, faintness, vertigo, sensations of cold, etc., have all been observed.

One gramme, taken for migraine, has produced vertigo, nausea, and trembling. The head-pains increased, while after a new dose all these features were increased and cyanosis added. If the kidneys are affected large doses may precipitate uræmic symptoms by leading to a complete suppression. A daily dosage of five grammes has also caused a febrile exanthema. The patches were profusely scattered upon the limbs, but were scanty on the trunk. They disappeared on pressure. There were at the same time headache and a flushed face. All of these accidents are, however, less frequent and less marked than with acetanilid or antipyrine.—*L'Union Médicale*, Dec. 22, 1891.

**Terrier (M.) on Fatal Poisoning from Cocaine Injected into the Tunica Vaginalis.**—The patient was a young man who had a hydrocele which had developed very quickly. Iodine injection was ordered after puncture and evacuation of the sac. Before the iodine solution was introduced the hospital interne operating, introduced a quantity of cocaine solution equivalent to thirty-eight centigrammes of the salt. After a few minutes the anæsthetic fluid was withdrawn and replaced by the iodine solution.

There were no immediate bad symptoms. In about an hour extreme paleness of the face came on with dilatation of the pupils, foaming at the mouth, and general convulsions. These features were in abeyance for a brief time but soon returned with redoubled intensity, and were followed by a fatal syncope.

At the autopsy mitral insufficiency with an atheromatous condition was found. At

least eleven other fatal cases have been reported from cocaine poisoning.

The author does not think that death should be attributed in this case to the heart lesion, but to the salts which produced the same effects as upon animals experimentally poisoned. He has frequently used the same dose under similar circumstances without any bad result.—*La Médecine Contemporaine*, Jan. 1, 1892.

**Kohos on the Treatment of Pulmonary Phthisis by Subcutaneous Injections of Cod-Liver Oil.**—The author claims six cures. The effects of the procedure are to lessen cough, expectoration, and night-sweats. The formula followed is as follows :

Pure cod-liver oil.....	100 grammes
Creoline.....	2 "
Sulphuric ether.....	1 gramme

The dose varies from one to thirty c.c. for each injection. The author draws attention to the antagonism between the pathological processes and leucocytes, and believes that all our therapeutic measures ought to be directed toward an increase in the number of the latter without in the least impairing their vitality. Only in this way can we favorably influence the tubercular process. The problem to solve is to find a substance which the leucocytes can mechanically incorporate in the same manner as they incorporate the bacilli, a substance which would aim alike to destroy the bacilli and to increase the vital resistance of the leucocytes. Kohos believes that cod-liver oil furnishes by its cholesterine such a remedy.—*L'Union Médicale*, Dec. 31, 1891.

**Raulin on Reversed or Inspiratory Phonation.**—The patient was a woman, born in Italy, single, and about thirty-five years old; she had complained of hoarseness for several months; family history was negative. Ever since thirteen she had been of a nervous disposition and whenever crossed or opposed in any way had had slight convulsive crises. Her menstruation had always been irregular. The hoarseness of which she complained came on, she declared, from fright occasioned by her falling down stairs.

On examination the vestibule of the larynx appeared perfectly normal. Vocal cords were healthy, but during the emission of the vowel E it was seen that while they were sufficiently tense, there was a very narrow triangular space left between them

posteriorly, its base being directed toward the arytenoids. At first it was thought that there was a paresis of the transverse muscle, but this supposition did not explain why the voice was jerky and why after pronouncing a few words, she got out of breath. During the examination it was noted that the chest enlarged instead of contracted during speech. The emission of both articulate and inarticulate sounds was therefore made during inspiration, and the non-apposition of the cords was due to the current of inspired air and not to paresis. It is worthy of note that while during phonation the ligamentous glottis was not closed, the cartilaginous portion was still less thus affected, and it was that which gave the triangular space between the cords. One might say that the respiratory glottis wished to preserve its physiological function, which is to open itself widely in inspiration.—*Marseille Médical*, Jan. 1, 1892.

**Berger (P.) Radical Cure of Lumbar Spina Bifida.**—The technique of an operation recently performed by the author was as follows: Two skin flaps were cut, one above and the other below at the expense of the integument covering the tumor. The sac was then opened and a cord which seemed to be a prolongation of the spinal marrow was carefully separated from its attachments and returned to the rachidian canal.

A bony lamella having the exact dimensions of the rachidian opening was cut from the shoulder-blade of a young rabbit and inserted in the opening, leaving a pedicle of meningeal covering outside. This latter was excised after suturing. Finally the skin flaps were brought together, covering the whole. No bad results followed the operation. The cicatrix seemed firm and hard, and there was every evidence to believe that the bony lamella would afford complete and permanent resistance. The paraplegia which the child had presented was somewhat increased by the operation. Berger makes no claim as to eventual results. Time alone can show whether hydrocephalus will develop.—*Gazette des Hôpitaux*, Jan. 14, 1892.

**Hamon on Hypodermatic Use of Quinine in Uncontrollable Vomiting.**—A woman, aged forty-two, suffered from persistent vomiting following a febrile urticaria. After several days of futile medication with various remedies, the author remarked

that the attacks came on about ten o'clock every morning and ceased about the same hour in the evening. Later, the attacks came on at noon and lasted only six hours. Thinking that there was some sort of a malarial element in the case, he gave quinine hydrochlorate (seven grains) hypodermatically in the retro-trochanteric region. This procedure was followed by immediate relief. A second injection on the day following practically cured the patient.

A second attack in the same patient some time after did not present a distinct intermittent type, but promptly yielded to the same therapeutic procedure.—*Le Courrier Médical*, Jan. 9, 1892.

**Desnos on Syringomyelia.**—The author recently reported a case of this affection occurring in a man, thirty-five, alcoholic, and with an old specific history. He presented very marked parietic features in the legs and to a less degree in the arms. The trophic disturbances were especially characterized by muscular atrophy of the thenar and hypothenar eminences. There was an exaggeration of the reflexes and a general trepidation as often seen in epileptics. Slight scoliosis existed. Syphilis is regarded as having been the causative factor in the case.—*Le Courrier Médical*, Jan. 2, 1892.

**Benzoyl Guaiacol and the Carbonate of Guaiacol in the Treatment of Tuberculosis.**—The former is produced by the action of benzoic acid on guaiacol, and when pure is a colorless powder, almost without odor, insoluble in water, but slightly soluble in acetic acid (even warm), very soluble in chloroform, ether, and warm alcohol. In the stomach and bowels, it resolves itself into its original ingredients.

The dose is 25 c. grms., thrice daily before meals, the daily quantity gradually being increased to 3 grammes (about 1½ grammes of guaiacol). It is well borne by the stomach and leads to a rapid diminution of the cough and expectoration, a temporary cessation of sweating, brings back the appetite, and causes an increase in weight. In short, the effects are identical with those of guaiacol and creosote.

In view of the impurities of guaiacol and its variable composition, Seifert and Holscher propose to substitute therefor the carbonate of guaiacol, for which they claim the following advantages.

1. It is a substance chemically pure, of a definite composition, solid, and crystalline ;

this latter property and the fixedness of its fusion point—86–90° C.—guarantee its purity.

2. The carbonate of guaiacol is odorless, insoluble in water, of neutral reaction, and free from any irritating action on mucous surfaces.

3. It does not disturb the digestion, and has no action whatever upon the healthy stomach. Only in the intestine does the resolution occur into its component elements, when guaiacol and carbonic acid are set free. On the other hand, in the stomach of tuberculous patients, where in general saphrophytic and parasitic bacteria

generally develop in great numbers, a large amount of guaiacol is set free by reason of the fermentative and putrefactive processes which there take place. The small amount of carbonic dioxide gas liberated, does not in the least interfere with the process. Guaiacol is absorbed in proportion as it is set free, so that it never accumulates in large quantities in the small intestine.

After the injection of the carbonate, the guaiacol is revealed in the urine in about from thirty to sixty minutes. A series of sixty cases is reported.—*Gazette Médicale de Liège*, Jan. 14, 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

BY ALEXANDER H. TRAVIS, M.D.

**Coats (J.) on the Spontaneous Healing of Tuberculosis; its Frequency and the Mode of its Occurrence.**—There is a tendency when considering the processes which follow tubercular infection to ascribe too much to the bacillus and too little to the predisposition of the individual; the bodies of children are exceedingly susceptible to tuberculosis, and when they are exposed to infection they are very liable to contract the disease, yet in adults there are the most diverse degrees of resistability. In some persons the invading bacilli are overcome by the living cells, in some the contest is doubtful, in others the tissues prove the weaker, while in a fourth class, more especially the subject of attention, after the disease has become established and has done much damage, there is so far a recovery that the infection is destroyed and removed, and nature repairs the damage as far as possible. In the process of repair, the inflammatory products (including the true tubercles), induced by the tubercular irritants, undergo caseous necrosis. The necrotic mass, in which are still contained living bacilli, may long remain unaltered, but usually either suppuration occurs around it, the caseous material softens and is discharged with the pus but not as a rule completely, the tuberculosis lingering on until the infective matter is entirely removed, when cicatrization occurs; or else, the necrosed material simply remains as a foreign substance and, receiving in course of time deposits of lime salts, changes to a

putty-like matter, or later into a hard stony mass. It is quite common to meet with such hard masses, sometimes of considerable size, in the mesentery—evidences of the previous existence of a tuberculosis, probably in early life, but now extinct. The other method of healing (by suppuration and discharge), commonly occurs in tubercular glands in the neck. In the lungs both forms of recovery occur; we find old cavities with smooth, clean walls, and cicatrices containing chalky deposits. In tuberculosis of bones there is always more or less of abscess-formation, and when recovery follows it is by means of granulation and formation of bony cicatrices. The soft tissue of the kidney forming a favorable structure for the advance of tuberculosis, it is doubtful if healing of tuberculosis in these organs ever occurs. Recovery from tuberculosis of the testis occurs in either of the ways described. In the peritoneum, if recovery occur, the caseous material is absorbed or calcified and the adhesions remain. Recovery from tuberculosis of the brain and meninges must be very rare. Evidences of healed tuberculosis are frequently found. As the result of careful scrutiny of his *post mortem* records for ten months, the author concludes that about 23 per cent. of the persons who die of disease unconnected with tuberculosis have been at a former period of life affected with some form of internal tuberculosis. As to the forms of tuberculosis, twenty out of the twenty-four were cases of healed tuberculosis of the lungs,



two were cases of healed tuberculosis of the peritoneum, one of the mesenteric glands, and one of the bronchial glands. There is a numerous class of cases in which the tubercular process becomes extinct in one place, but extends and becomes active elsewhere. An old, but perhaps healed tuberculosis of the lung is frequently associated with a recent active tuberculosis without any intermediate stage. Generally the explanation is to be found in a tubercular laryngitis which, following the old pulmonary lesion, has continued for years, and reinfects with its secretions the lungs. The practical deduction is not to regard the tubercular laryngitis as of trivial importance.—*British Medical Journal*, Oct. 31, 1891.

**Fowler (J. P.) on Arrested Pulmonary Tuberculosis.**—After criticizing the nomenclature of various forms of tuberculosis of the lungs, the author comments on the common occurrence at the apices of the lung of lesions which are regarded by most pathologists as evidence of previous tuberculous disease which has undergone arrest, although this view of their character is not accepted by some authorities. These lesions are enumerated:

1. Pigmented tubercles which have undergone fibrosis.
2. Fibroid induration, puckering and scarring of the apex, with or without obvious tubercles.
3. Areas of caseation often surrounded by a fibrous capsule and deeply-pigmented tissue, the latter sometimes presenting obvious tubercles.
4. Cretified masses similarly situated.
5. Cavities of the size of a hazelnut with smooth walls, filled with pigmented material of caseous consistence and not in communication with a bronchus.

With the above lesions certain others are generally associated and are consecutive to them. They are: chronic inflammatory and compensatory changes in the lungs and neighboring organs, and caseation of bronchial glands.

In a series of 1,943 necropsies of patients who had died of non-tubercular disease in the Middlesex Hospital, obsolete tubercle was present in the lungs in 177.9 per cent. In the majority of cases the lesion was fibrous or caseous, and in only 43 cases out of the 177 is it stated that a cavity was present. Not all the cavities found *post mortem* were clinically recognizable cavities; sometimes a false appearance of excavation is produced by the

growth of a fibrous capsule around a caseous mass. The author's own pathological experience gives little support to the view that a cavity, recognizable as such by physical signs, may become completely obliterated.

The evidence that these lesions at the apex of a lung indicate the arrest of a tuberculous process is briefly considered. The arrest of the tubercular disease is effected by the formation of a barrier of inflammatory tissue which checks the progressive spread of the disease, and if the increased resisting power of the individual can be long enough maintained, a fibrous capsule will be formed and arrest will be complete. But the disease, although encapsuled, is not eliminated and there is possibility of danger in the future.

It is not the remedies which effect the elimination of tuberculous deposits which we are to regard most hopefully (in the treatment of pulmonary tuberculosis), but rather such as increase the resisting power of the individual and enable his tissues to stop the progress of the disease.

In estimating the probability of arrest occurring in any given case, the extent of lung affected is of greater importance than the presence of a cavity. Arrest may be hoped for in cases of fibroid tuberculosis with a larger area of infiltration than in any other form of the disease. If a cavity can be recognized clinically, the probabilities are, that at some later period there will be an extension of the tuberculous process, and that death will occur from a tuberculous lesion. To this rule there are, however, many exceptions.

The relation of the presence of the bacilli to the question of arrest is of interest. So long as they continue in the sputa, the lesion cannot be encapsuled. But their presence does not necessarily imply that the area of infiltration is extending, and it is compatible with complete absence of symptoms and signs, and the enjoyment of good health.

There is no doubt that the lesions referred to represent a period of ill-health, and probably they might, during their active period, have been recognized by physical signs. Pulmonary tuberculosis in this early stage has been frequently overlooked in the past, but since in the examination of the sputum we possess a test for the presence of the disease, it is possible to make a certain diagnosis at a much earlier period,

and for this reason it becomes of great importance that we should be aware how frequently the process is arrested.—*British Medical Journal*, Oct. 31, 1891.

**Hopkins (H. R.) on the Prevention of Tuberculosis.**—It is difficult to explain why, although nearly a quarter of a century has passed since Villemin demonstrated that tuberculosis is an inoculable disease, and ten years since Robert Koch published his demonstration of the specific and infectious character of tuberculosis, there has been no organized effort to prevent the spread of this disease. That the question is an eminently practical one requires but a reference to a few statistics. Our last census shows that nearly one hundred thousand people die yearly from tuberculosis. It is probably safe to estimate the period of incapacity for productive labor in each of the decedents at, at least, ten years. This means a loss to this country of the labor of one million people for one year. Placing the individual earnings at a low figure—\$200 per year—the pecuniary value of this lost energy is \$200,000,000 per year. No allowance is made in this attempted estimate for the loss from productive industry of those engaged in the care of the sick, nor for the sums expended for medicines, appliances, and professional attention. It is time that the attention of the public should be forcibly drawn by the medical profession to the important practical question of the prevention of this terrible waste of life and productive energy.—*Buffalo Med. and Surg. Journal*, January, 1892.

**Lancereaux (E.) on Ulcerative Endocarditis Secondary to Suppuration in the Genital Organs; Other Causes of Septic Endocarditis.**—Two cases of septic endocarditis secondary to suppuration in the genital tract are described. The first patient æt. thirty-nine, of previous good health, was attacked with vomiting, headache, and fever. A furuncle was on the right hand. A pustular eruption resembling small-pox developed on the upper extremities, trunk, and face; and three large bullæ filled with milky fluid appeared on the trunk. Respiration hurried but regular. Clinical examination of the thoracic and abdominal viscera was negative, except that there was slight increase of the splenic dulness. The left epididymis was swollen and there was slight effusion into the corresponding tunica vaginalis. Urine was

not albuminous. No urethral discharge. In pus removed from the pustules were found numerous mono- and diplococci and a few streptococci: similar organisms were also found in the blood. The patient became delirious, developed diarrhœa, and on the eleventh day of the disease died. The autopsy showed miliary abscesses in most of the organs; normal urethra; an old abscess cavity with thickened walls in the left epididymis containing brownish pus; pus in the vesiculæ seminales and vasa deferentia; in the heart, warty vegetations attached to the base of the mitral and tricuspid valves and their chordæ tendinæ, but no evidences of previous alterations of these valves. A fragment of one of the endocardial vegetations was composed almost entirely of staphylococci. Staphylococci were also obtained in cultures of blood and pus. The second patient was a laborer sixty-four years of age, greatly emaciated with pinched features, lustreless eyes, earthy skin, and dry black tongue; temperature between 37° and 39° C.; pulse 96. The arteries were hard and at the base of the heart there was a double murmur. Mucous râles over the chest, sighing intermittent respiration, urine ammoniacal, turbid, and containing pus. A stricture of urethra prevented irrigation of bladder. The patient lay semi-conscious, and died seven days after coming under observation. At the autopsy were found arterial atheroma with calcareous degeneration of one of the sigmoid valves; and around the aortic orifice recent friable, ulcerated vegetations; the segments of the valves were indurated, and one was swollen, and beneath it a little cavity seemed to indicate a purulent focus which had become emptied during life. The spleen contained infarctions. There were two strictures of the urethra; there was purulent inflammation of the bladder and prostate. The results of micro-biological examination were similar to those in the first case.

The microbes most commonly observed in ulcerative endocarditis are the round micrococci. But in the other cases lanceolated and encapsulated microbes identical with that of pneumonia had been found in the valvular vegetations. Two such cases are described: The first, a woman aged twenty-three, had apparently passed successfully through an attack of lobar pneumonia of the left lung; on the seventh

day after defervescence she was taken with a violent chill and temperature rose to  $105^{\circ}$  F. This was repeated the next day and the temperature remained high until the death of the patient four days later. The auscultatory signs seemed to indicate a spread of the pneumonia to the opposite side, but there was nothing to indicate that the heart was involved in any way. At the autopsy were found recent, friable vegetations containing pneumococci grafted on an old endocarditis.

The other patient was a man who, on the ninth day of a pneumonia of the lower lobe of the left lung, was attacked with violent oppression, delirium, and increase of temperature. The head was drawn back with stiffness of neck, conjugate deviation of the head and eyes to the right. The pulse feeble, rapid, dicrotic; Cheyne-Stokes respiration. The next day the patient was in condition of collapse and died during the afternoon. Besides the pneumonic consolidation there were found recent vegetations of aortic and mitral and tricuspid valves and suppurative meningitis at the base and right side of the brain. Encapsulated, ovoid microbes were found in the hepatized lung, meninges, and mitral and tricuspid vegetations. The treatment of ulcerative endocarditis is chiefly preventive. Quinine and salicylic acid have not given brilliant results, although one patient in whom was diagnosed ulcerative endocarditis of mitral and aortic valves with micrococci in the blood, seemed to get better under the use of the latter drug.—Translation in the *Medical Age*, Nov. 10, 1891.

**Fräntzel on Tachycardia.**—F., who opposes Nothnagel's view that in cases of paroxysmal tachycardia every form of treatment is useless, because serious disease does not result from it and because the rapidity of the pulse diminishes of itself after some time, after referring to a case in which serious symptoms were caused by congestion in the pulmonary circulation, describes a case in which the tachycardia, led to a fatal issue. Digitalis used for a time with success failed to have effect, and increasing enlargement of the heart and progressive cyanosis were followed by death. The heart was hypertrophied, in the left ventricle there was profuse growth of connective tissue, thickest near the endocardium, gradually diminishing toward the pericardium. The papillary muscles and trabeculæ were very thin and every-

where infiltrated with new-formed connective tissue. The entire endocardium of the left ventricle was much thickened.—*Deutsch. Med. Wochenschrift*, 1891, No. 9, abstracted in *Centralblatt f. klin. Med.*, 1891, No. 48.

**Shattuck, (F. C.) on Pericarditis with Large Hæmorrhagic Effusion in a Patient with Graves' Disease; Double Dry Pleurisy.**—The patient, a female twenty-four years old, of unimportant family and previous history, entered the Massachusetts General Hospital, January 19, 1891. About three weeks previously she had had an attack of acute tonsillitis and January 5th she began to suffer from feverishness, pain and swelling in several joints, pain in the cardiac region, and dry cough. On admission the joint symptoms were slight, pulse was 120, temperature  $103.2^{\circ}$ . Cardiac impulse was indistinct; area of dulness was moderately increased; pericardial friction at the apex and aortic area; pulmonic second sound somewhat accentuated. After a few days of apparent improvement the temperature rose on the 27th to  $104^{\circ}$ , with regular pulse of 130. The pericardial effusion increased rapidly, the dulness extending from outside the left nearly to the right nipple, and to the second rib. On the 28th about an ounce of bloody serum was removed with an aspirator. No more could be obtained although the canula was unobstructed. The next day the heart action was irregular and intermittent. On the 30th, the temperature reached  $105^{\circ}$ . She was dusky and pulsus paradoxus was marked. The area of dulness had increased and impulse was distinct in the fifth space and anterior axillary line. Only half an ounce of bloody serum could be withdrawn. February 1st the condition about the same, aspiration was repeated but no fluid was obtained. February 4th pleural friction was heard over much of right side of chest front and behind. Sudden delirium; other symptoms continuing. The next day the pulse became very poor, respiration choking, and patient was dusky and in a cold sweat. Nitroglycerine was given with apparently good effect. Delirium disappeared. The patient gradually improved; pleural friction developing over the left side, and a systolic murmur at the heart apex. The fluid was steadily absorbed. Early in March she was able to sit up. The heart action remained rapid and excitable but

regular. At this time slight enlargement of the thyroid gland and well marked tremor were observed. There was no exophthalmus. Convalescence was interrupted by an attack of acute tonsillitis. In April she was discharged practically well. The area of cardiac dulness was but little increased, the systolic souffle was present, and the cardinal symptoms of Graves' disease, save exophthalmos, were evident.—*Boston Med. and Surg. Journal*, Nov. 5, 1891.

**Bamberger (E.) on Changes in the Structure of Bones with Chronic Diseases of the Lungs and Heart.**—Bamberger has observed (*Zeitschr. für klin. Med.*, Bd. xviii, Hft. 3 u. 4) in a number of cases of chronic disease of the lungs, particularly bronchiectasis, and of the heart, besides the frequent thickening of the end phalanges of the fingers, an alteration in the long bones especially in the distal portions of the bones of the leg and forearm. The bones of the hands and feet are likewise affected. The changes are produced by an ossifying periostitis which, in long-continued cases, results in increase thickness and density of the shaft. They are accompanied by spontaneous pains as well as by tenderness on pressure.

The author would account for the occurrence of these changes in connection with chronic diseases of the lung by supposing that substances formed in the putrid secretions are absorbed into the circulation and act similarly to phosphorus as irritants to bone-producing tissue. In cardiac disease the secretions are furnished by the chronic pulmonary congestion accompanying the cardiac lesion. Experimental injections of bronchiectatic secretions gave negative results. The usual hypothesis that venous congestion is the main etiological factor is applicable only in the cases occurring with heart disease. Probably, however, different causes operate in each case, but the affection depends directly on congestion only in cases of congenital heart disease.—Abstract in *Centralblatt für klin. Med.*, No. 49, 1891.

**Osler on Two Cases of Pernicious Malaria.**—A sailor, age thirty-four, had, a month before admission to the hospital, passed a week in Savannah, where he had been in the habit of sleeping upon the grass all night. His illness, preceded by a week of slight malaise, began on September 7th, when, without any chill or fever, he began to have vomiting. He felt very weak and

prostrated; the vomiting continued the next two days, but he had no chills. On admission, September 10th, he was very weak and tremulous, with congested eyes, flushed cheeks, and stupid appearance. Tongue swollen and heavily furred. Temperature  $101^{\circ}$ , pulse 104, small, tension not increased. Edge of spleen just palpable on deep inspiration. Examination of the blood showed very abundant small intracorpuseular forms of Laveran's organisms, the majority not pigmented. An unusual number of leucocytes presented pigment granules. The temperature reached  $102.2^{\circ}$  the next day; there was much vomiting and profound weakness. During the following two days the vomiting diminished and the number of plasmodia in the blood decreased. On the 14th and 15th the temperature was subnormal, the vomiting increased and contained blood. He became drowsy, dull, and restless. The temperature was  $95^{\circ}$  on the 16th, gradually rising to  $97.2^{\circ}$ . Urine contained albumen, and hyaline and granular casts. He remained stupid and restless, became unconscious, and died in the evening. Treatment consisted of half-drachm doses of quinine every six hours, given hypodermically when vomiting became excessive.

Autopsy: peritoneum here and there dark and slaty in color; lungs congested at bases; spleen 13 by 8 cm., extremely soft, of a dirty brown hue; liver large, slate-gray in color, Glisson's sheath everywhere deeply pigmented; kidneys large, firm surface somewhat mottled; a small area of pigmentation on pia and a small hemorrhage on dura. Microscopic examination: Liver—pigment granules in liver cells and in the capillaries. Spleen—pigment granules mostly free. Some of the red blood corpuscles contained pigmented plasmodia. Kidneys—swelling and granular changes in epithelium of convoluted tubules, glomeruli full; pigment in tubules, interbulbar tissue, and glomeruli.

L. K. admitted July 18, 1889. On the 9th he had a heat stroke followed by unconsciousness for two hours. After that he did not feel well, complaining of pains in the head, sensations of coldness, and numbness of the feet and hands. Appearance was healthy and examination was negative except that the heart sounds were weak, expiration slightly prolonged, the area of liver dulness diminished. Urine

1010, no albumen or casts. The temperature remained normal until the afternoon of the 25th, when he had a chill and it ran up to 105°. Temperature fell the next day to 101°. On the 27th temperature rose to 103°; pulse 104, irregular and intermittent. There were feeble râles and high-pitched percussion note in right infra-scapular region. There was profuse sweating, and breathing was of Cheyne-Stokes' type. His condition gradually grew worse, and on August 2d he died.

**Autopsy:** Pulmonary emphysema, œdema and congestion of dependent parts, muco-purulent bronchitis, no pneumonia, thickening of pigmented patches on peritoneum, catarrhal colitis; liver 51 ounces, myristicated, pigmented; spleen 13 by 8 cm., soft, pigmented. Blood from the finger showed small numbers of malarial organisms. In a specimen of splenic pulp were found two actively free flagella.—*Johns Hopkins Hospital Bulletin*, December, 1891.

**Rheinstein on the Diagnosis of Affections of the Gall-Passage.**—The gall-bladder, normally not palpable, may be palpated in certain pathological conditions:—1, when its consistence is increased by abnormal contents; 2, when increased in size; 3, when the position of the fundus is abnormally low. The first and second conditions are usually combined. A descent of the gall-bladder is possible only when the lower edge of the liver is unusually low, either from increase of size or descent of the liver, which occurs in the majority of women who have borne children. The following conditions are necessary for successful palpation of the gall-bladder: The abdominal wall must be relaxed and contain but a slight deposit of fat, and the abdomen must not be swollen by intestinal contents. The up-right position is best adapted for the examination, which is performed in the following manner: The physician, standing on the right side of the patient, who breathes quietly with open mouth, lays his left hand flat on the right lumbar region, with fingers toward the spinal column. The right hand is laid on the anterior abdominal wall, with the ulna border on the median line, and the finger-tips touching the border of the ninth costal cartilage. Then while strong, steady pressure anteriorly is made with the left hand, the right hand is carefully pressed

deeper in the opposite direction with each respiration. The gall-bladder may be so fixed and palpated. If there has been descent of the liver, a more important method of examination may be employed. The left hand placed firmly beneath the right costal border, pressing backward and toward the spinal column, immobilizes the liver in its abnormal position. The finger-tips of the right hand are pressed firmly beneath the free edge of the liver. The fundus of the gall-bladder is thus surrounded beneath by the four fingers, while the thumb, resting against the anterior surface, affords counter-pressure. During the preceding year the author was able to palpate the gall-bladder in twenty-four cases, in none of which had symptoms from that source been complained of.—*Deutsche Med. Wochenschrift*, No. 44, 1891.

**Frese (C.), Ross (G. G.), and Wilbert (W. J.) on a Case of Acute Glanders or Farcy.**—B. F. S., aged twenty-nine, a driver by occupation, was admitted to the hospital September 1st. The patient, always a healthy man, noticed six days prior to admission to the hospital that his right shoulder was painful and reddened. He could not remember having injured the part. A diagnosis of erysipelas was then made. The reddening and pain increased, until at the time of his admission the anterior and posterior surfaces of the shoulder and the side of the neck were involved. The eruption at this time was erythematous, without vesicles, not punctate or marginate, but very painful. There was considerable tension, and some fluctuation. The temperature rose higher each morning; the evening temperature ran along the 105° line. Pulse was quick and full, bowels constipated. No signs of organic disease. Exploratory incision into the inflamed area demonstrated the presence of but little pus.

His condition grew steadily worse. On the 8th of September a small abscess formed at the angle of the jaw on the right side. This abscess was quickly followed by others, until the entire cutaneous surface, with the exception of the palmar surfaces of the hand and the plantar surfaces of the feet, was covered. These abscesses appeared as erythematous patches, becoming indurated and soon breaking down, forming, near the centre, a small pustule, which contained a single drop of pus. Incision disclosed a grayish tena-

cious and adherent slough larger than the size of the pustule would indicate. Several abscesses on the scalp were so near together, that on breaking down they formed a single ulcer with this peculiar slough at the bottom, discharging a thin, irritating, almost colorless fluid. The discharge from the posterior and anterior nares was copious, offensive, and irritating. Swallowing was difficult, and respiration impaired. At times he was conscious, but more often displayed a mild, talkative delirium. A typical typhoid condition developed, with high temperature, feeble, rapid pulse, and incontinence of urine. He died on September 11th.

Post-mortem examination showed nothing except many secondary abscesses in the lungs, and enlarged and friable spleen.

Microscopical examination of serous fluid obtained from the infraclavicular

region showed bacilli in size closely resembling tubercle bacilli. Successive cultures made from this fluid developed characteristic growths. Slides were prepared of nearly all the colonies, and the appearances in all were identical. The bacilli were generally arranged singly, occasionally in pairs at right angles, or in V-shaped figures, and resembled tubercle bacilli in shape, although a trifle thicker. Plate culture made from the blood gave two kinds of colonies, some identical with the colonies obtained from the serous fluid, while the others proved to be made up of the staphylococcus pyogenes aureus. The diagnosis made from the clinical history and bacteriological examination was corroborated by the fact that the patient had lately been in charge of sick horses, all of which had died.—*Medical News*, Dec. 12, 1891.

## REPORT ON ORTHOPEDIC SURGERY.

BY JOHN RIDLON, M.D.

**White (J. W.) on the Surgery of the Spine.**—This paper is a careful study of all reported cases to September, 1891. Cases are classified as follows :

- a. Congenital deformities.
- b. Tuberculosis of the spine.
- c. Neoplasms.
- d. Traumatisms.

a. Spina bifida is the only condition considered. The conclusions are that on the whole the method of injection of the sac offers the best prospect of ultimate recovery with the least immediate danger.

b. The indications for operation may be (1) for the evacuation of pus; (2) for the removal of a sequestrum or of the focus of carious bone; (3) for the relief of the cord from pressure.

For the removal of diseased bone the conclusions do not materially differ from those of Chipault :

The search for the focus of bony disease in caries of the spine is indicated with sufficient frequency to give the matter a real surgical interest. The posterior arch is accessible at all levels. The seat of disease may be sought in exceptional cases even before the appearance of an abscess, and in the presence of an abscess may be reached with great ease and certainty. The bodies of the lumbar vertebræ are acces-

sible by Treves' operation even when no abscess which is clinically appreciable is found. If an abscess exists, even when it points anteriorly, it is proper to open it by the lumbar route and seek the focus of disease. If it points in the loin, it should, of course be opened in that region. The lumbar incision permits us, if the abscess depends on vertebral disease, to reach, without wounding the pleura, the twelfth dorsal vertebra, and even occasionally to go above it. The eleventh dorsal is usually, in my opinion, not to be reached with safety, and, unless extensive caries of the ribs has taken place, the bodies of the other dorsal vertebræ are not to be approached surgically even in the presence of an abscess.

For the relief of pressure symptoms the conclusions are as follows :

1. The paralysis in Pott's disease is not, as a rule, due to a transverse myelitis or a hopeless degeneration, and is not usually due to the pressure of the carious or displaced vertebræ, but is, in the majority of cases, the result of an external pachymeningitis, which results in the formation of an extra-dural connective-tissue tumor.

2. Speaking generally, a favorable prognosis is to be given, especially in children, in cases of Pott's paralysis in which the

abscess, if any exists, can be evacuated, the treatment by extension and with a plaster jacket can be employed, and the patient can be put under the most favorable hygienic conditions.

3. In cases in which all this has been tried unsuccessfully, or in those in which the disease is slowly but steadily progressing to an unfavorable termination, when with more or less complete loss of motion and sensation below the level of the lesion there are incontinence of urine and fæces and the development of bed-sores, and especially when acute symptoms threaten life, resection becomes entirely justifiable.

4. Operation having been decided upon for any or all of the above reasons, the prognosis will be favorable in direct proportion to the youth and strength of the patient, the absence of generalized tuberculosis, and the nearness of the lesion to the base of the spine.

5. When the tuberculous process affects the arches and there is paraplegia, we may sometimes operate, hoping not only to free the cord, but to remove at the same time the focus of disease. This double indication may also be fulfilled in those cases where, without bony disease, there is posterior pachymeningitis or a tuberculoma occupying the canal. Here again, however, time and careful attention to hygiene, including change to sea- or mountain-air, often work wonders.

6. If the lesion of the bodies of the vertebræ is in the lumbar region at a point where these bodies are accessible, it might be possible in certain cases to expose the cord from the back, by removal of the laminæ, with the object not only of removing pressure but of reaching and taking away the diseased bone and tubercular granulation.

7. In tuberculosis of the body of a vertebra and compression of the cord by anterior pachymeningitis we can fulfil only one indication,—liberate the cord from pressure. We should operate only in grave cases where acute compression, the appearance of respiratory complications, the rapid development of degenerative processes, force us to interfere, or where the course of a chronic case is steadily toward a fatal termination although no advanced visceral tuberculous lesions are present.

c. Neoplasms unassociated with traumatism or caries. The author concludes that

every case of focal spinal lesion thought to depend on a tumor and not distinctly a malignant and generalized disease should be regarded as amenable to operative interference, no matter how marked or how long continued the symptoms of pressure may be.

d. Spinal traumatism. The conclusions are :

1. Some objections urged against operative interference in spinal traumatisms—*i.e.*, hemorrhage, frequency of absolute destruction of the cord, pressure from inaccessible fragments of bone, etc.—have been shown to be unsupported by clinical facts; others were largely due to a well-founded dread of (a) the shock in those cases operated on in pre-anæsthetic times, and (b) consecutive inflammation, suppuration, and pyæmia in pre-antiseptic periods.

2. The results of recent operative interference in properly selected cases of fractures of the spine are encouraging, and should lead to the more frequent employment of resection of the posterior arches and laminæ; (a) in all cases in which depression of those portions, either from fracture or from dislocation, is obvious; (b) in some cases in which after fracture rapidly progressive degenerative changes manifest themselves; (c) in all cases in which there is compression of the cauda equina from any cause, whether from anterior or posterior fracture or from cicatricial tissue; (d) in the presence of characteristic symptoms of spinal hemorrhage, intra- or extra-medullary.

3. Operation is contra-indicated by a history of such severe crushing force as would be likely to cause disorganization of the cord. The question which will remain in doubt previous to operation will usually be that of the extent of damage done to the cord and the possibility of its taking on reparative action. As to this, the safest rule is that which has been formulated by Lauenstein,—namely, that if after the lapse of six or ten weeks there is incontinence of urine with cystitis, or incontinence of fæces, and especially if there are also the development and spreading of bed-sores, but little is to be hoped for from the unaided efforts of nature. If, however, these symptoms be absent, and if there be the least improvement in either sensation or motion, it will be proper for the surgeon to delay operative interference still longer.—

*Therap. Gaz.*, Oct. 15, 1891.

**McClintock (J.C.) Report of Four Cases of Spinal Surgery.**—Three of the cases were fractures with more or less displacement of the parts. Pressure was found and removed. All were improved, but none were completely cured. The other case was a spinal abscess, probably syphilitic, and the result was complete restoration of function.—*Kas. City Med. Jour.*, November, 1891.

**Schaefer (F.C.) on Vertebral Surgery.**—Three cases are reported in detail. In conclusion it is advised: In the cervical region it can usually be accomplished most readily by following up the sinus of the abscess cavity, or, as has been done in the upper region of the pharynx, *via* mouth. In the lumbar region an incision over transverse processes through the superficial tissues and along the border of the multifidus spinæ muscles,  $1\frac{1}{2}$  inches from the spinous processes, enables one to get behind the psoas muscle (as in case 1, reported), to the vertebral body. The sacral body can be reached as in case 3, *via* the triangle between the transverse process of the fifth lumbar vertebra and the base of the sacrum; also through the great sciatic notch, through or back of the rectum, or by trephining through the bone from behind; in the dorsal region, between the transverse processes, but the space here is so narrow as to preclude the possibility of thorough treatment. I therefore incised the soft tissues, one inch from the spinous processes, uncovered and removed the transverse process of the diseased bone, or of the one just below it, and resected the head and neck of the corresponding rib. This permits a large finger to reach the postero-lateral angle of the diseased body, and gives room for the introduction of the curette, sharp spoon, or forceps, and leaves a large space for drainage tube. Should it be desirable to carry the drainage tube through the column, a transverse process with end of the rib of the opposite side can also be removed, when it can readily be passed through. In doing this operation we must avoid the pleura, dorsal ganglia of the sympathetic, spinal nerves, and intercostal arteries. One can hardly avoid injuring the artery. The other tissues need not be damaged. Hemorrhage can be controlled. The difficult part of the operation is in disarticulating the head of the rib, as it is deeply placed and firmly attached. To avoid injuring the pleura and the ganglia

of the sympathetic, it is a good plan after sawing through (chiselling or cutting with bone forceps) the rib at its tuberosity, to strip off the periosteum in front of the neck and head of the rib. The transverse process I remove with chisel. The disarticulation of the rib can be done with scissors or knife, by following the attachments of the ligaments about the neck and head of the rib. The operation is practicable, less formidable than laminectomy; the latter operation involves more cutting. The spinal supports are not so much weakened, and the spinal canal not opened, unless the back portion of the vertebral body is destroyed. Even then the posterior common ligament may protect the canal. Of course it is to be understood that the operation is not intended to take the place of laminectomy in cases of great angular curvature, but to be resorted to before the disease has produced any great deformity, as soon as an abscess has been discovered.—*Four. Am. Med. Assoc.*, Dec. 19, 1891.

**Lane (A.) on Laminectomy for Spinal Compression.**—Eleven cases are reported upon which lead to the following conclusions: 1. That in every case, with one exception, where the granulation material had not yet broken down the cord was compressed by an abscess. 2. That in none of these cases was there observed any such fibrous neoplasm involving the posterior surface of the dura mater as was described by that distinguished pioneer of spinal surgery, Dr. MacEwen, showing that that condition must be of infrequent occurrence. 3. That the conditions found at the operation appeared in every case to preclude the possibility of recovery of the spinal column and cord without surgical interference. 4. That several of these cases would of a certainty have died of chest or bladder complications from which they were suffering, and which only disappeared when they recovered power over their intercostal and abdominal muscles. 5. That though several of the patients were dangerously ill, they bore the operation very well. 6. That in the only case in which death was consequent upon the operation the child was extremely feeble. 7. That in only one case was the subsequent formation of tubercular material so rapid as to obliterate very quickly the benefit derived from the two operations. 8. That apart from the presence of the symp-



toms resulting from pressure on the cord, the very large amount of disease present in every case but one (Case 2) and the size and extent of the abscess cavities rendered it impossible for the bodies to ankylose and the spinal column to become useful without operative interference. 9. That in most of these cases the cord was compressed about the level of the fifth or sixth dorsal vertebra. In the face of the facts he thought he was quite justified in urging that every case of paraplegia due to spinal caries should be operated on with as little delay as possible. He considered that the treatment by prolonged recumbency was bad both in principle and in practice. Operative interference involves very slight risk, it is followed by very little pain, it relieves the patient of the compression symptoms, and lastly, but not of least importance, it enables one to treat the diseased vertebræ directly, not only by spooning, irrigation, and the thorough removal of all carious material and diseased bone, but also by the repeated local application of iodoform, from which he believed he had obtained the greatest benefit.—*Med. Press*, Oct. 28, 1891.

**Wirt (W. E.) on Pott's Disease.**—The paper is confined to the mechanical treatment; and the plaster jacket and Taylor brace are advised as the most serviceable apparatus.—*Cleveland Med. Gaz.*, Nov., 1891.

**Hoadley (A. E.) on Case of Spondylitis with Marked Rotary Lateral Curvature, with Abscess; Recovery without Deformity.**—The case presented a well-marked right dorsal curve of the spine at about its middle, the spinous processes deviating to the right more than an inch, with prominent right scapula, and prominent left chest; there was no tenderness on pressure or manipulation; no elevation of temperature, and the curve could be entirely obliterated by partial suspension and manipulation. The history gave habitual malposition in drawing as a cause, and no hereditary taint. Ultimately an abscess developed, was opened, and bare bone was touched at the side of one of the vertebral bodies. The deformity was corrected and consolidation obtained.—*Chicago Med. Recorder*, Oct., 1891.

**Lovett (R. W.) on Diagnosis of Pott's Disease.**—The diagnosis of Pott's disease does not rest upon the history of the case, and cannot be established by any subjective symptoms, however significant.

The diagnosis as such must rest upon physical signs, and these are of two classes: those caused by muscular spasm, and those caused by bony deformity. The symptoms caused by bony deformity occur late in the history of the disease, and it is very desirable that the symptoms caused by muscular spasm should be recognized, and the presence of the disease known before the occurrence of the angular deformity.

Lateral deviation of the spine is almost a universal symptom in Pott's disease, and it is to be considered as a very suggestive symptom. High temperature is often of use in pointing to the probable presence of tubercular bone disease. The other diagnostic symptoms of Pott's disease are considered, and a hasty *résumé* made of the differential diagnosis.—*Am. Jour. Med. Sci.*, Dec., 1891.

**Burrell (H. L.) on Abscesses in Pott's Disease.**—Efficient mechanical support of the spine is the prime factor in the treatment of caries of the spine associated with abscess. Under an expectant plan of treatment some abscesses will disappear. The indication for operative interference is a steady or rapid decline in the patient's general condition. The operation should consist of thorough evacuation of the abscess, and establishment of drainage from as near the seat of the disease as practicable.—*Med. News*, Dec. 12, 1891.

**Townsend (W. R.) on the Treatment of Abscesses of Pott's Disease.**—An analysis of 380 consecutive cases of Pott's disease is given. Seventy-five of these cases had abscesses, and the results of their treatment is given. Cases that were doing well were simply treated by braces; in some the abscess disappeared. When the abscess was of a size to interfere with the application of a brace or with locomotion it was aspirated. In those cases where the abscess had become infected free openings were made, thorough drainage established, and, where possible, diseased bone scraped. The results were good, despite the fact that nearly all the cases at the time of the operation, or at some subsequent dressing, became infected, though in all this infection was slight.—*Med. News*, Dec. 19, 1891.

**Taylor (H. L.) on the Value of Mechanical Treatment in Old and Neglected Cases of Pott's Disease.**—The course of the disease is often tedious and indefinite, healing slow. Complete

bony ankylosis of the diseased vertebræ is both later and rarer than usually supposed, as indicated by more or less mobility through the kyphosis, often discoverable by careful testing in long-standing and excessively deformed cases, and by the fact that in many such cases the deformity goes on increasing. Owing to imperfect treatment or other causes, symptoms and disability often persist for many years, coincidentally with a gradual increase of deformity; or, after a considerable period of immunity, the original trouble may be lighted up by a strain or fall. The old and often apparently desperate cases, whether in children or adults, usually respond kindly to mechanical treatment, which should be employed with the same definite end in view as in more recent ones. The figure and carriage may sometimes be improved, and when this is impossible, increase may be prevented and the patient restored to health and usefulness. Abscesses and paralysis do not prevent a favorable prognosis in a large majority of cases.—*Med. News*, Dec. 5, 1891.

**Hanna (W. J.) on the Treatment of the Earlier Stages of Hip-Joint Disease.**—In the treatment of the earlier stages of hip disease immobilization is advised, to be had either by plaster of Paris, or the Thomas hip splint, of which a carefully detailed description is given. One case, an interesting one, is reported.—*Occidental Med. Times*, Nov. 1891.

**Spires (H. H.) on Hip-Joint Disease.**—A case is reported in which "a perfect cure" resulted from the administration of two grains of calomel three times a day, with a tablespoonful of Rochelle salts every third morning, for a period of five months. There was no mechanical or operative treatment, and the patient was not confined to bed.—*Cleveland Med. Gaz.*, Dec., 1891.

**Gibney (V. P.) on the Diagnosis and Treatment of Hip-Joint Disease.**—Six cases are reported in detail, and the following conclusions are reached:

(1) An early diagnosis can be made by any one who examines the case carefully, and who familiarizes himself with the functions of a sound joint.

(2) The necessity of regarding a case as chronic and therefore requiring prolonged protection of the joint.

(3) The comfort that any patient may derive from an apparatus that is made to fit.

(4) The benign progress of a case thus protected.

(5) The importance of maintaining parallelism and equality of the limbs at all times and under all circumstances.

(6) The advantages of an out-of-door life, which cannot be secured by bed treatment.

(7) The necessity for excision of the hip when well directed efforts at securing rest and protection to the joints have failed.—*Boston Med. and Surg. Jour.*, Dec. 10, 1891.

**Phelps (A. M.) on Hip-Joint Disease and Some New Lateral Traction Splints for its Treatment.**—The paper discusses the question of rest and motion in the treatment of joint disease, reviewing the author's experiments to prove that prolonged immobilization does not tend to ankylosis, either in healthy or diseased joints. The various longitudinal and lateral tractions hip-splints, which have been referred to in these columns, are described and illustrated. In conclusion he says: "My observations lead me to believe that one of the most serious elements of destruction in hip-joint disease is the trauma and pressure produced by muscular spasm; that fixation of the joint without extension is an impossibility; that the successful treatment of the joint must depend upon its absolute immobilization, which can only be produced by proper extension and fixation; that the constitutional treatment of hip-joint disease amounts to but little, independently of mechanical treatment; that mechanics is everything; that extension in the line of the axis of the shaft and in the time of deformity alone in hip-joint disease is entirely wrong; that extension should be made in a line parallel to the axis of the neck—in other words, two lines of extension—otherwise the idea of extension is not perfectly carried out; that ankylosis of the joint is not produced by immobilization, but by the severity and character of the inflammation; that the long traction hip-splints in general use neither properly extend nor immobilize the joint; that in a large percentage of cases the intra-articular pressure results in the destruction of the joint or in ankylosis, as is proved by statistics; that the results in hip-joint disease should be as good as those in knee-joint disease, and will be, provided perfect immobilization can be maintained; that patients should never be allowed to step upon

any portative apparatus; that a high shoe on the well leg, and crutches, should be insisted upon until the patient is cured; finally, that the angular deformity seen in cured cases should not occur—such cases are a standing rebuke to the splint and methods employed. In other words, no patient with hip-joint disease need ever recover with angular deformity. In exceptional cases a slight degree of deformity had better be left than that resort be had to osteotomy or extensive myotomy.—*Med. News*, Dec. 26, 1891.

**Brackett (E. G.) on Atrophy in Joint Disease.**—The author claims that Vulpian's theory of nerve influence is not sufficient to explain the condition of atrophy in joint disease. If from this cause, the degree of atrophy should bear a relation to the severity of the disease or its duration, and those structures in the neighborhood of the joint should be most affected. But it varies within wide limits, not bearing a constant relation to the severity, to the duration, or to the amount of pain. It is, however, most strongly influenced by the amount of use, as seen by its appearance in mild cases treated by immobilization, in the uniform distribution over the entire limb, and in its relation to the amount of use given the limb. The continuance of its influence is seen in the lack of development, involving uniformly all parts of the limb, and the proportion of this to the amount of freedom permitted. The facts are that the degree of the atrophy, which always occurs, does not bear a constant relation to the disease, but is chiefly determined by the amount of use permitted the limb; that this same atrophy occurs under other conditions which impair the use of the limb, but not occasioned by disease; that this atrophy is nearly, if not quite, evenly distributed over the entire limb; that during the period of growth the loss of development extends to the whole leg, and bears a relation to the degree of its confinement.—*Boston Med. and Surg. Jour.*, Dec. 10, 1891.

**Wilson (A.) on the Aseptic Closure of Long-Standing Sinuses Having their Origin in Tubercular Joints.**—It is advised to excise all of the tubercular tissue of the sinus, and all, or as much as possible, of the focus of disease within the joint if such remains, and, the operation having been performed aseptically and antiseptically, to close the opening without

drainage. If all diseased tissue has been removed primary union may be anticipated, but if any disease remain the operation may have to be repeated one or more times. The results are sufficiently good to warrant this.—*Times and Register*, Nov. 28, 1891.

**Whitman (R.) on Observations on Torticollis, with Particular Reference to the Significance of the So-Called Hematoma of the Sternomastoid Muscle.**—A report is made on 264 cases of torticollis, showing that the affection is more frequent in females than in males, and the sides of the neck equally liable. Finding that acquired torticollis is often the result of enlarged and suppurating cervical glands, and in such cases not persistent in character, it is concluded that the deformity should be treated in its early stage by some appliance which holds the head in a perfect position.

If the deformity has persisted for more than six months mechanical treatment is usually inefficient, and in these cases free division of all contracted parts, with careful after-treatment, is indicated.—*Med. News*, Oct. 24, 1891.

**Willard (De F.) on Operative Treatment of Deformities Resulting from Infantile Spinal and Cerebral Spastic Paralysis.**—The deformities of infantile paralysis can be prevented by apparatus, but if this has been neglected and distortion has occurred, secure the best possible limb by immediate surgical procedures, and make the patient walk in some way. Many hopelessly distorted cases can be put upon their feet; even great deformity of limbs resulting from infantile paralysis should not deter us from an attempt to straighten the limb and give the individual locomotion. Atrophied limbs can be straightened, and can be incorporated as part of an apparatus; locomotion is thus to a certain degree rendered possible. Easier, quicker, and better rectification is secured by surgical than by mechanical measures in the majority of cases. Immediate rectification, if possible, should be the rule, in order to save pain and time. Mechanical appliances in the shape of apparatus crutches, wheeled crutches, etc., are usually required, and should be employed after straightening. Excision is capable of straightening even badly deformed limbs, and continuous improvement may be expected.—*Med. News*, Dec. 19, 1891.

**Wilson (J. A.) on Congenital Talipes; Some Cases Bearing on its Etiology.**—Three cases, occurring consecutively in the same family, of congenital varus are reported. The second and third cases had also other congenital deformities apparently due to uterine pressure, and from this and other reasons the author makes a strong argument in favor of the pressure theory in the etiology of these deformities.—*Glasgow Med. Jour.*, Oct., 1891.

**Chrystie (T. M. L.) on Congenital Club-foot, with Absence of the Great Toe and Contiguous Bones of the Right Foot.**—Illustrations depict the patient before and after treatment. The first row of the phalanges, the first metatarsal, and the internal cuneiform bones, the two tibial, and the other three muscles of the leg whose tendons are attached thereto were all absent; and the scaphoid was not fully developed. The remainder of the foot was well developed.—*Med. News*, Oct. 31, 1891.

**Bauer (L.) on Congenital Defects of the Lower Extremities and their Reconstruction.**—Three cases are reported, being all that have come under the observation of the author during almost threescore years under advantageous clinical opportunities.—*The Clinique*, Nov., 1891.

**Horrocks (W.) on Splint for the Treatment of Incipient Genu Valgum.**—The splint consists of two parts, a

thigh- and leg-piece, united by a rivet behind the knee. This allows lateral, but not antero-posterior, movement of the two parts. The thigh-piece consists of a hollow trough, which fits the back and sides of the thigh, reaching as high as the fold of the buttock behind, the perineal fold on the inner side, and the great trochanter on the outer side. Below the thigh-piece is united with the leg-piece in the middle line, and prolonged as a flat piece, which lies against the back of the leg-piece. On the inner side the thigh-piece reaches below the prominent internal condyle, while the outer side is cut away so as to fit the muscular mass on the outer side of the thigh. The leg-piece consists of a trough, which fits the back and sides of the leg. It is united above with the thigh-piece; below it fits under the back part of the sole of the foot, with a hole behind for the heel. Across the front of the leg- and thigh-pieces two straps with buckles are fixed. To the end of the flat vertical bar a strap is attached. The splint is applied by firmly fixing the leg- and thigh-pieces on the child's limb in the faulty position, the flat bar prolonging downwards the thigh-piece then lying to the inner side of the leg-piece. The limb is straightened by bringing this vertical bar behind the leg-piece, and fixing it in this position by passing the strap around the leg to a button on the inner side of the leg-piece. The splint is made of thin iron or tin, and is suitably padded.—*Brit. Med. Jour.*, Oct. 31, 1891.

## REPORT ON THERAPEUTICS.

**Shand (J.) on Ptyalism from Colchicum.**—A woman past middle life suffered from an acute pain in the left hypochondrium with œdema of the ankles. The œdema soon became general and the pain unbearable. No organic lesion could be discovered. Diuretics were useless. A careful examination of the patient's life history showed a thread of gouty rheumatism running through it all. Colchicum was selected as the remedy, and was begun in single minim doses of the tincture of the seed every eight hours in a little aromatic spirit of ammonia. By the twelfth day the dropsy was greatly improved, but a profuse salivation had developed. On the sixteenth day pain and dropsy had all gone. The ptyalism speedily disappeared on less-

ening the dose of colchicum.—*N. Y. Med. Jour.*, Jan. 2, 1892.

**Ketcham (S. R.) on Phenacetin in the Treatment of Influenza.**—It is of great advantage to have at hand a remedy upon which one can place reliance, particularly for those diseases in which the onset is rapid and is attended with intense pain and hyperæsthesia and considerable nervous derangement, the temperature mounting up to 102° or 103°, as is the case in influenza. Such a remedy will have enhanced value if it be quick in action, and if it can be employed without injury to patients. These advantages belong to phenacetin and sodium salicylate, which I have used in combination in a considerable number of cases of influenza with the

happiest results. I have found the combination rapid, safe, and certain in action. I prescribe 5 grains each of phenacetin and sodium salicylate with  $2\frac{1}{2}$  grains of sugar of milk, the first two doses to be taken at an interval of two hours, and the subsequent doses to be taken at intervals of three hours. A laxative is given, if required. Attending bronchitis, pneumonia, either croupous or catarrhal, or other complications, while not a contra-indication to the employment of phenacetin and sodium salicylate, should be treated in the usual manner.

The method of treatment outlined may elicit criticism and be condemned as dangerous, particularly by those who have not employed it. I have, however, found it safe. I have employed it in the cases of children as young as nine months, as well as in adults advanced in years. I do not advise the reckless and indiscriminate use of phenacetin; but, given intelligently and watched carefully, I consider it not only a safe, but a most valuable remedy. When necessary, stimulation may be added to the treatment.—*Phil. Med. News*, Jan. 9, 1892.

**Robertson (Wm.) on Benzol in the Treatment of Influenza and its Complications.**—In the later cases of influenza that have come under my attention I have been struck by the rapid amelioration of all the symptoms of the attack under treatment with benzol. The drug known to druggists as pure benzol is perhaps as reliable a pulmonary antiseptic as any we know of. In an hour or so after its administration it is clearly recognized in the patient's breath. The general results of its action in influenza are as follows:

In about two hours after the first dose the headache and pain in the back disappear, and in about six hours the fever has subsided—not to return, so far as I have yet experienced, so long as the use of the drug is kept up. The catarrhal symptoms have also by this time become less prominent, as also the suffusion of the eyes and flushing of the face. So far I have seen no tendency to the development of pneumonia under cases treated by the drug throughout and early seen to.

If we are to suppose influenza to be of microbic origin and that the germs of the disease first make their assault on the pulmonary mucosa, then there seems to

be an indication for the adoption of some such volatile antiseptic as benzol.

The drug can be dispensed in capsules or in mixture (℥iij for children, ℥v for adults, every two or three hours), for example:  $\mathcal{R}$  Benzol. pur. ℥80; spt. vini  $\frac{3}{4}$  ss.; spt. chlorof. co. 3 iij; mucil. tragac. ad  $\frac{3}{4}$  viij;  $\frac{3}{4}$  ss. every three hours in lemonade. In its favor it may be stated that patients complain of no inconvenience from its use. It certainly does not reduce the patient in any way or interfere with digestion. I have generally kept up the action of the drug for three or four days after the disappearance of all symptoms.—*British. Med. Jour.*, Jan. 23, 1892.

**Woodward (J. W.) on Cocaine in Hay-Fever.**—My hay-fever patients are always cautioned to avoid cocaine, because, as a rule, it aggravates their symptoms. At first cocaine produces a pleasing effect, but the duration of it is short and the sequence is an aggravation of the patient's condition, which additional doses of cocaine cannot relieve. To my knowledge there are only two good methods of treatment for hay-fever: 1. Removal to regions where the disease does not exist. 2. Treatment of the nose, and especially cauterization of the sensitive areas, which are to be found in greatest abundance over the triangular cartilage of the septum and over the anterior third of the inferior turbinated body. I am aware that some observers have not been able to locate such sensitive areas in their patients. Such areas do exist, nevertheless, and I have no doubt that had my cases fallen into those observers' hands their experience would have been different.

Cauterization of the nose will not cure every case of hay-fever by any means, nor will any variety of local treatment. But I am certain that many cases may be relieved, and some cured, by treatment of the nose. Some of my results have been very satisfactory.—*N. Y. Med. Jour.*, Dec. 5, 1891.

**Smith (W. A.) on Antipyrin in Whooping-Cough.**—After alluding to the high commendation given to the remedy for this tedious malady, the writer continues: My own experience with the drug has been limited to about ten cases during the last three years, and although I have not seen any harm come from its use, the effects in each case were negative. The cases ranged from one to twelve years of age, and were first seen in an early stage of the disease. The remedy was given after Sonnenberger's

method—*i.e.*, a dose graduated according to the age of the child. In no case could I see that the disease was at all shortened in its course, nor was there any difference in the severity of the complaint when the remedy was stopped after having been administered for some days.

It is quite clear, therefore, to my mind, that although we have in antipyrin a most valuable remedy in certain forms of disease, its claim to rank as a specific in whooping-cough is not yet established on a sure and certain foundation. — *Phil. Med. News*, Jan. 9, 1892.

**Feer (E.) on Antipyrin in Whooping-Cough.**—The writer sums up his hospital experience as follows: About eighty cases of whooping-cough have been recently treated here with antipyrin, as many decigrammes as the child was years of age (or xv. grs. for a patient of ten years) being given morning and evening. The remedy was gratuitously given to the parents in powder form and ordered to be administered in sweetened water. Fifty-seven of the cases were seen at least twice again, so that a definite opinion could be formed of the action of the remedy. In 41, improvement was evident at the second visit (after three to seven days), and in some cases the improvement could be characterized as striking. In five cases, alleviation of the symptoms was not distinctly affected till the third or fourth visit. The improvement was only temporary with five of the patients; three of these had brothers and sisters simultaneously suffering from whooping-cough. Generally it was found that where several children of the same family were affected at the same time, the disease was more obstinate and ran a more tedious course. This is consistent with the opinion of Prof. Hagenbach that the children mutually reinfect one another under such conditions. No improvement could be traced in seven cases (three of these, however, were only seen twice), and four patients got worse at first; these were, however, such as had only recently (from three to ten days) developed the characteristic symptoms of the disease, and three improved subsequently.

Of the numerous cases that only returned once to the hospital a considerable proportion would doubtless be such children as were so much benefited by the remedy that the parents did not think it necessary to bring them again. In several instances an un-

mistakable relapse was evident when the administration of antipyrin was omitted by the neglect of the parents.

The beneficial effect of the remedy was therefore established in four fifths of the total number of cases, in a few it was astonishingly marked, but in none was it at all uncertain. The attacks diminished in violence and also in frequency, particularly at night. The remedy was always well borne, vomiting was arrested, the appetite increased, the children became generally more cheerful and slept better. The course of the disease was decidedly shortened, although necessarily the nature of out-patient treatment does not admit of the reckoning of an average duration. Complications (broncho-pneumonia) were rare, but did appear a few times (particularly with rachitic patients) during the antipyrin treatment. — *Medical Press and Circular*, Jan. 13, 1892.

**Barber (A. W.) on the Treatment of Rattlesnake-Bite by Permanganate of Potassium, Based on Nine Successful Cases.**—I would formulate the treatment for poison of the rattlesnake as follows:

1. Free incisions to the bottom of the wound and immediate cauterization; or, if this is not practicable, sucking of the wound.
2. The immediate application of an intermittent tourniquet—that is, one which is relaxed for a moment at a time,—so that the poison may gain admission into the circulation in small doses.
3. The free administration of alcohol or carbonate of ammonium.

This might be termed the *urgency treatment* of snake-bite-poisoning. The *curative treatment* requires:

4. Free incisions into all portions of the inflamed tissues, and the thorough kneading into these incisions of a fifteen per cent. solution of permanganate of potassium.
5. Multiple injections of the same solution into all the inflamed regions, but particularly into the region of the wound.
6. The complete surrounding of all the involved tissues, by permanganate of potassium injections placed from half an inch to an inch apart, the needle being driven into the healthy tissue just beyond the line of demarcation, and its point being carried to the deepest part of the border of the indurated area.
7. The permanganate of potassium solution should be used freely in fifteen per

cent. solution. I have used one and a half drachms of the pure drug diluted, and would not hesitate to use four times that quantity were it necessary, since it seems to exert no deleterious effect, either locally or generally.

8. The involved area should be dressed by means of lint saturated with fifteen per cent. permanganate of potassium solution. Stimulants should be given according to the indications,—i. e., the condition of the pulse. Laxatives, diuretics, and diaphoretics should be administered to aid in the elimination of the poison. The diet should be as nutritious as the stomach can digest.—*Therap. Gazette*, Jan. 15, 1892.

**Lowe (T. P.) on Two Cases of Anthrax Successfully Treated by Excising the Pustule.**—A man named W—, aged thirty-eight, was first attacked, his wife contracting the disease fourteen days later. I saw him for the first time on March 11th, the seventh-day of the disease. I found him suffering from a large malignant pustule on the right side of the neck, about the middle of the posterior triangle. The pustule consisted of a central dark-brown eschar, surrounded by a zone of flattened vesicles, outside of which was an inflammatory zone, the whole of the right side of the neck being enormously swollen and oedematous. The treatment I adopted was that of removing the pustule by an elliptical incision; and this included the whole area of vesiculation, together with a considerable portion of healthy skin on each side and the deep tissues beneath, so as to ensure complete eradication. The wound was freely irrigated with hot perchloride solution, and well dusted with iodoform before its margins were brought together by sutures. The patient made a satisfactory and uninterrupted recovery.

Mrs. W—, the wife, aged forty, who was assiduous in her attentions upon her husband, and to whom were entrusted the evening dressings, was attacked by the same disease fourteen days later. In her case the pustule appeared on the cheek. In the absence of proper home nursing I was obliged to send the case into hospital, where the pustule was excised, and its base freely cauterized. The operation in this case was performed on the fourth day, and was followed by rapid convalescence. In both instances the disease was inoculated by the finger nail, the husband having scratched his neck after washing some

buffalo hide, and his wife her cheek after dressing her husband's wound. Both cases suggest that anthrax, when it attacks the skin, may remain local for a considerable time, and produce a mild affection as compared with the same disease when attacking internal organs. The bacilli of anthrax are known to have a marked preference for the superficial layers of the dermis, slowly penetrating into the deeper parts. Nevertheless, it seems very extraordinary that, in the case of anthrax, the excision of the focus of inoculation should arrest the progress of the disease. It may be explained on the hypothesis that the behavior of the tissues toward the bacillus is very different from that toward most other infective micro-organisms, and an illustration is obtained of one form of tissue resistance.—*London Lancet*, Jan. 23, 1892.

**Durrett (R.) on Muriate of Calcium in Tuberculosis.**—The author gives to adults 30-40 grains in a glass of milk after each meal, with proportionally smaller doses for children. Several cases are reported in which the remedy was used with good effect, but they are far too few to be at all valuable as bearing on the question.—*Am. Pract. and News*, Dec. 12, 1891.

**Soble (N. W.) on Atropine in Hæmoptysis.**—The author discusses the anatomical and physiological relation of the pulmonary blood-vessels. To sustain his views with regard to atropine, he quotes freely from Bartholow, Cardarilli, Brunton, Ringer, and others. He has used the remedy in four cases (where other remedies had failed) with complete success. He concludes as follows:

1. The vaso-motor control over the pulmonary arterioles is nearly nil.
2. Vasodilators acting on the systemic blood-vessels can have no effect on the pulmonary arteries.
3. Atropine in full medicinal doses diminishes blood pressure by causing dilatation of the peripheral blood-vessels.
4. Atropine is, therefore, theoretically indicated in hemorrhage from the blood-vessels of the lungs.—*N. Y. Med. Record*, Jan. 2, 1892.

**Foy (G.) on Jambul in Diabetes Mellitus.**—This article, though presenting nothing original, is of value as it gives a sort of collective investigation of the opinions and results of various physicians, with the remedy the world over. A valuable list of references is appended.

The powdered seeds are given in 5-grain

doses, and lessen the polyuria as well as the glycosuria.—*Med. Press and Circular*, Jan. 13, 1892.

**Hare (H. A.) on the Treatment of Anæmia by Copper and Arsenic.**—After the digestive tube has been treated by the remedies ordinarily used to regulate its action, the arsenite of copper has an opportunity to perform a double duty. Acting as does arsenic as a stimulant to mucous membranes all over the body, in addition to its stimulant influence on nutrition, it tends to prevent disorders of the digestive mucous membrane, and so renders perfect secretion and absorption possible, preventing the auto-intoxication of the patient from the fermentation and decomposition changes in the contents of the stomach and bowel. Happily joined to this, the copper adds tone to the system, and promotes assimilation and the production of muscular tissue.

Acting in the belief that arsenite of copper would form a useful combination in the treatment of anæmia and debility, the writer has tried it in a number of cases with very encouraging results. Under these circumstances the digestion improves, the color becomes more like the normal, and, either by a direct effect on nutrition or on digestion or on both, the patients progressed rapidly towards health, provided, of course, that the anæmia was functional and not organic in origin.

In the dose of  $\frac{1}{8}$  or  $\frac{1}{4}$  of a grain, arsenite of copper will, I think, often prove of service, if given three times a day after meals, and from its combination may prove to be superior to Fowler's solution not only in anæmia but also in chorea and similar nervous ailments.—*Therap. Gazette*, Jan. 15, 1892.

**Thompson (L. G.) on Tartar Emetic as a Remedy for Intestinal Catarrh.**—Chills or indigestible food probably cause the following (four) varieties of the same disorder :

1. An offensive diarrhœa of dark matter, accompanied by tenesmus and travelling pains in the pelvis. Raised temperature. Great depression, with frontal and occipital headache. Nausea and vomiting. Tongue silvered and scarlet-edged.

2. A purging of dark matter in early morning. Tenesmus. Scoring of anus, and cramps in the thick muscles. Raised temperature. Great depression. Flushing of face and frontal headache. Nausea and

retching. Tongue and lips deficient in secretion. Edges of tongue moist, and flesh tint heavy in value.

3. Watery, gray dejections, which are inclined to leak through the sphincter, and are worse after midnight. Temperature normal. Great depression. No pains or aches. Deficient buccal secretions. Vulvulus.

4. Sickening, offensive, curdy, watery diarrhœa; always worse after midnight. Temperature raised. Great depression. Alternate flushing and pallor of face. A common ailment of infants.

**Treatment.**—Commence with a purgative dose of calomel. Secure rest and warmth. Cut off all stimulating foods, and give milk with dextrose and dextrine. One minim of the antimonial wine or  $\frac{1}{16}$  of a grain of tartarated antimony given each hour will soon restore the secretions; the mouth becomes moist, nausea disappears, appetite returns, the discharges cease to be offensive and become more consistent. One quarter or one half minim will be ample for an infant.—*London Lancet*, Nov. 28, 1891.

**Stevens (A. B.) on an Aid to Defecation.**—An even greater "aid to defecation" than "pressure on the posterior half of the perineum," which Mr. Heath recommends, will be found in pressure with the finger upon the buttock just externally to the right lip of the anal orifice. Although the rectum in quite the last part of its course passes downwards in the middle line, yet the course of the gut has before that for long been from the left. The main impact of its protrusive force is therefore exercised, by means of the advancing fæcal mass, upon the right rectal wall near the anal orifice. Here, therefore, the opposing force should be brought to bear.—*London Lancet*, Jan. 23, 1892.

**Stewart (W. R. H.) on Chronic Acid in the Treatment of Cysts.**—The writer gives his experience with this remedy in three cases of ranula and seven of cystic goitre.

The three cases of ranula occurred in two males and one female: the former had received previous treatment without any benefit; the latter had not sought advice before. All three had large cysts, and the mode of treatment followed was the same in each. A portion of the cyst was cut away, and the contents washed out. A saturated solution of chromic acid was then freely applied with a chromic acid



carrier to several points of the cyst wall. At the end of the week, the cavity having much diminished, the acid was again applied, and in from a fortnight to three weeks, the wound had healed and all signs of the tumor had disappeared. There were no bad symptoms.

The seven cases of cystic goitre were in females. The tumors were tapped in the usual manner and the contents washed out. After all hemorrhage had ceased, the saturated chromic acid solution was applied with a carrier through the cannula to the walls of the cyst, in the same manner as with the ranulas. Six of the seven cases healed rapidly after from two to three applications, but the seventh and second of the series resisted for a long time all attempts, and it was not until three months had passed and some half-a-dozen applications had been made that the tumor disappeared. But neither in this nor in any of the other cases was there a bad symptom, and Stewart attributes the length of time the last mentioned case took to heal to the fact that there was a considerable amount of hemorrhagic oozing, which to a certain extent neutralized the action of the acid. It is, therefore, advisable to see that hemorrhage is, as much as possible, arrested before applying the acid.—*London Lancet*, Dec. 19, 1891.

**Montgomery (R. H.) on the Treatment of Umbilical Hemorrhage.**—A case is reported of an eight months' male child free from any hereditary taint, which did well till the eighth day of extra-uterine life, when hemorrhage was noticed from the umbilicus. The cord had come away on the fourth, leaving apparently a normal navel. When the hemorrhage began, alum was used without avail. Alcohol poured over the navel was temporarily efficient, but the hemorrhage returned later, and the alcohol was useless to check it. Pledgets of cotton, saturated with Monsel's solution and fastened by a graduated compress with an elastic band, stayed the flow for eight hours only. Digital compression prevented the escape of blood, but did not cause any coagulation. Finally the umbilicus was transfixed with needles at right angles to each other, going deeply into the tissues and crossing each other beneath the umbilical depression. Their ends were then approximated and a figure of eight ligature applied. This controlled the bleeding at once. The needles were removed after

forty-eight hours, but the hemorrhage had been permanently checked. The child began to develop rapidly, and at eleven months was in fine physical condition.—*N. Y. Med. Jour.*, Jan. 9, 1892.

**Rodman (J.) on the Treatment of Hemorrhage in Typhoid Fever.**—I wish to enter a protest against the usual and generally accepted treatment of intestinal hemorrhage in typhoid fever. My last few cases having ended in recovery, without medication, encourage me to believe that my previous results (about 50 per cent. mortality) in this alarming accident were due to hyper-medication. The hemorrhage has usually ceased by the time that its occurrence is recognized.

The remedial agents usually employed are ergotin, tannic acid, plumbic acetate, and opium. The hypodermatic injection of ergotin causes, first, a lowering of the arterial pressure, which is soon followed by an increase of pressure, so that ergot, if not harmful, is at least of doubtful utility. I have seen two cases of gangrene of the toes in the course of typhoid fever in which ergot had been administered.

A popular and favorite prescription for intestinal hemorrhage in typhoid fever contains tannic acid, tincture of opium, turpentine, and chloroform. The tannic acid is presumably selected for its local effect in traversing the intestine, or for its conversion into gallic acid in the circulation. The astringent effect can at best be but slight. The tincture of opium is anti-peristaltic, but it is questionable whether muscular paralysis is desirable. Should one administer opium after labor or abortion when the uterus is full of clots which may become septic? In typhoid fever the putrid sloughs in the intestine are a source of hemorrhage.—*Phil. Med. News.*, Jan. 9, 1892.

**Stinson (J. E.) on the Treatment of Hemorrhage in Typhoid Fever.**—Leaving a discussion of all symptoms out of the question, just as soon as I find I have typhoid fever to contend with I place adults on a sulpho-carbolate of quinine treatment, giving them—

R—Quinina sulph.	}	. . .	aa	gr. x.
Potassii chlorat.				
Acid. carbol., pur.				

Capsules, No. x.

S.—One every four hours, with two, three, or four drops of oil of turpentine.

I know the quinine sulph. and acid carbol. are antidotal to each other, and that the

resultant compound is insoluble, yet this very fact made it the more rational, because I did not care whether the remedy was dissolved in the stomach, or waited until it reached the lower bowel before assimilation. It does not matter whether the treatment is rational or not; it has proved a powerful factor for good in my hands, whether or not this is due to its beneficial effect or to its insolubility, and consequently the doing of nothing according to the expectant plan. Instead of the new and depressing antipyretics, I use tincture of veratrum viride, in doses of one, two, or three drops as necessary, to control fever. I feed persistently from the beginning with fluid foods, using both beef and bird soups, and sweet and butter-milk, alternating these and insisting on one of them at least every two hours. No case of hemorrhage demanding attention has occurred since the above medication has been followed.—*Phil. Med. News*, Jan. 30, 1892.

**Stewart (D. D.) on the Cause of the Inutility of Ergot in the Intestinal Hemorrhage of Enteric Fever.**—A hemorrhage of sufficient gravity in enteric fever to demand a resort to specific

measures to cause its cessation usually emanates from an eroded vessel. Ergot here, as in the hematemesis of gastric ulcer—also commonly dependent upon the erosion of an artery,—is not only useless but absolutely harmful, since, from its constricting effects on the vessels being limited to the arterioles, and causing resistance *à fronte*, when a vessel larger than an arteriole is the source of hemorrhage, the increased pressure results in augmentation of the bleeding. This fact, though of vast importance, is apparently known to few. The principle underlying it should govern the administration of ergot for the control of hemorrhage—to use in that produced by capillary oozing, to avoid in that resulting from rupture of a vessel larger than an arteriole.

Still another important objection to the employment of ergot in the intestinal hemorrhage of enteric fever is the fact that active peristaltic movements are thereby produced, the effects of which would inevitably be to disturb the ulcerated bowel, to provoke more rapid separation of the sloughs, and to aggravate the tendency to bleeding.—*Phil. Med. News*, Jan. 23, 1892.

## REPORT ON GYNÆCOLOGY.

BY W. EVELYN PORTER, M.D.

### Wylie (W. Gill) on the Influence of Imperfect Development of the Generative Organs as a Cause of Disease.

—The natural tendency in studying a disease is to attribute the cause of it to some immediate exciting influence, such as a fall, or exposure to cold. This is especially true in gynæcology. The real cause is often overlooked, resulting in the establishment of methods of treatment based upon false ideas, which has led to much useless treatment.

Take for instance catarrhal endometritis resulting in dysmenorrhœa, sterility, etc. It was until recently almost universally attributed to falls causing antelexion, or to exposure to cold at menstruation. This view of the etiology led to the use of pessaries and other vain efforts to straighten the uterus, to useless and often harmful rest in bed during menstruation, confinement to the house, and undue limitation of physical exercise. The important fact that imperfect development of the uterus pre-

disposes to catarrhal disease was, and is still, rarely considered in deciding upon a method of treating dysmenorrhœa. The writer recognized the importance of the subject years ago, and referred to it in an article in the *American Journal of Obstetrics*, vol. xv., No. 1, January, 1882. In that article he also referred to the fact that imperfect development was likely to result in sterility, and that when pregnancy did occur, laceration of the diseased uterine tissue was sure to follow. In the *American Journal of Obstetrics*, September, 1883, he referred to the fact that imperfect development was the real cause of the pathological conditions usually termed antelexion of the uterus. Congenital influences preventing perfect development greatly predispose to antelexion of the uterus, and undoubtedly have much to do with the premature atrophy and degeneration, so frequently associated with it. Again in the *System of Gynæcology* by American authors, he states his views on the influence of this

condition as a cause of dysmenorrhœa. Reference is made to these articles from the fact that little or nothing had been written on the subject previous to that time.

The general tendency of the present day is to restrict the physical development of our females by limiting their out-of-door life and exercise, and at the same time, forcing mental development after they reach ten or eleven years of age, when changing from girlhood to womanhood. This tendency is especially marked in this country, and is an important cause of many of the diseases peculiar to women.

The generative organs are the last to develop, remaining practically dormant from early childhood to the age of eleven or twelve, but between the ages of eleven and sixteen their activity commences, making large demands on the system. To be sure of full development, therefore, a girl must have a surplus of physical and nerve force during this period. If this force is closely used up, by special mental and emotional work or drain, the generative organs will fail to develop sufficiently to perform their functions normally. The uterus remains in an infantile state, it is anteflexed, and the glands and follicles of the cervix become diseased, causing granular erosion, which was treated by the older men as ulceration.

Bad hygienic surroundings, a serious illness, especially when there is anæmia during this period, is likely to produce the same result. The most constant and earliest symptoms are leucorrhœa and irregular and painful menstruation; but not infrequently a patient may complain of a dragging feeling about the pelvis, or a pain in the left side, usually with constipation, and often with symptoms of fissure-in-ano, or hemorrhoids. Mental depression and hysteria sometimes exist. If the case is not treated, irregular and profuse menstruation follows, due to the irritation resulting in congestion and abnormal vascularity, and finally fungous granulations develop in the endometrium above the os internum. The patient is apt to be sterile, but when pregnancy does occur the os uteri is usually imperfectly developed, hard and incapable of distending sufficiently to permit of the expulsion of the child without laceration. The tissue being diseased fails to heal, involution is delayed, the uterus remains soft and ligaments relaxed, and we get the cases of so-called displacement. Excluding new growths and acute sepsis, we have in this

the real cause of most of the local conditions from which women suffer.

The essentials of treatment, in brief, consist in attention to the general health during the period of development, and if operative measures be needed later, the free divulsion, curetting, and draining of the uterus with the application of carbolic acid.

If these views be correct, much can be done not only in securing more effective means of curing but preventing diseases of women.—*Trans. of the Am. Gyn. Soc.*, 1891.

**Lusk (Wm. T.) on the Remote Results of the Removal of the Ovaries and Tubes.**—Removal of diseased ovaries and tubes is followed in many cases by the relief of local pain, and where pus exists the danger to life diminished; the danger of the operation being small as weighed against the terrors of chronic invalidism. By simple measures in minor gynæcology, however, such as the replacing of retroverted uterus and introduction of a pessary, the necessity for the performance of oöphorectomy may be avoided.

The usual history of successful cases of salpingo-oöphorectomy is about as follows: In the first place, if the appendages of both sides are removed we have cessation of menstruation in about 86 per cent. of all cases, following either immediately or very shortly after the operation. This means the loss of the most distinctive sign of sexual activity. In addition there is atrophy of the uterus and vaso-motor disturbances, such as hot flushes, profuse perspiration, etc. In short, the climacteric is prematurely reached. The sexual appetite may be either unchanged, increased, weakened, or abolished altogether. Out of 26 cases reported by Zweifel, in 10 no change was observed, in 3 the desire was weakened, in 3 it was lost, while 10 reported they never had any. Another serious consideration with these patients is the fact that marriage cannot be entertained without a previous explanation of the condition. It may be stated that ordinarily the women from whom the appendages are removed are already sterile, but this is not always so, the writer reporting a case illustrating this point.

The question of operative measures to be employed should be carefully weighed in every case before a decision is arrived at. It is the author's opinion that most cases of tubal swelling yield to unheroic treatment, although it is futile to claim

that all will do so. For success, patency of the tubal canal is necessary. In a large number of cases, where other means have failed, salpingotomy furnishes marvellous results, and these very results should be observed and studied collectively in order to come to satisfactory conclusions. As admitted by Tait, fistulous tracts, fistulous communications with the bladder and intestines, and hemorrhage between the folds of the broad ligament will occur, and pelvic pains will remain in certain cases despite all precautions. The writer records 65 cases of oöphorectomy, either for degenerative changes in the tubes or ovaries, or for the arrest of myomatous growths, with two deaths. Of these many have disappeared, many have returned restored to health, and a few remain unimproved.

The most frequent causes of failure in this class of cases seem to be the incomplete removal of the appendages, complications resulting from the operation, and morbid conditions not connected with the organs removed. Hegar enumerates the following as causes of persistent pain: Adhesions of the intestines to the stumps, irritation due to ligatures, and local inflammation of the peritoneal or of the pelvic connective tissue. This latter may either be the result of the operation or an exacerbation of a previous inflammation. Ventral hernia, resulting in diminution of intra-abdominal pressure, abdominal and pelvic hyperæmia, meteorism of the intestines, and traction upon the ligaments of the various viscera. Mr. Tait reports cases where cysts were found near the amputated extremities of one or both tubes, resulting in pelvic pains.

In some cases no cause is discovered upon performance of a second laparotomy, yet temporary improvement may follow the operation, and the only explanation is an existing element of hysteria. The removal of healthy uterine appendages in various nervous derangements, as epilepsy and insanity, has proved unsuccessful and should be regarded as hardly better than malpractice. Reports as to the frequency of serious mental changes as a consequence of oöphorectomy differ widely, some denying any connection between the two events, and others claiming it as a frequent sequela.

The author concludes his paper with a plea for more conservative gynæcology, stating that in cases of enlarged and tender

tubes he first resorts to rest, vaginal tampon, douches, massage, faradism, and a tonic regimen. Where the tubal swelling is intermittent and is associated with a narrow cervical canal he uses Goodell's dilator to secure drainage of the uterine cavity. If the damming up of secretions in the tubes is the result of adhesions, he tries to break them up by Schultze's method, provided the sacs contain no pus. To ascertain this fact he introduces an exploring needle through the vagina. For hydro-salpinx he advocates the withdrawal of the fluid through the vagina; and for pyo-salpinx, when near the vagina, he opens and drains from below. Where laparotomy is demanded the recommendation of Martin and of Polk to preserve as much as possible of ovarian and tubal structures should be followed, as by so doing the symptoms may be relieved and the feminine functions maintained.

Appended to the article is a table showing the results of 26 cases of abdominal section performed by Dr. Chas. C. Lee.—*Am. Journal Obstet.*, Nov., 1891.

**Sinkler (Wharton) on the Remote Results of Removal of the Tubes and Ovaries.**—The increase of the number of operations of this character performed yearly renders the subject of especial importance. Operators are seldom able to keep track of their patients for any length of time after the operation, and thus are unable to obtain any satisfactory data in regard to the ultimate results. The facts have to be obtained from various sources, as the family physician, the neurologist, or other specialists under whose care they may fall.

The cases should be divided into two distinct classes; first those where the operation is done for disease of the tubes or ovaries; and secondly, those done for disorders of the nervous system supposedly aggravated by menstrual activity. Of the first class the writer makes but brief mention, having been dealt of from a surgical standpoint by the referee in the discussion. He has observed excellent results following removal of the appendages for the various inflammatory conditions, and asserts that in this class it is generally conceded that the most permanent results are to be looked for.

The physiological effects are the same in both classes, being more pronounced in young subjects than in old. Operations performed before or about the time of

puberty, result in the arrest of sexual characteristics, while later in life no change is observed in this particular. The phenomena noticed in most cases are almost identical with those of the menopause, embracing flushings, sweatings, disturbances of heart action, paræsthesia, mental irregularity or depression of varying degree.

(1) The remote effects are usually an improvement in the general health, better nutrition and increase in strength.

(2) The rapid increase of flesh attributed to this period is seldom observed, and the appearance of coarse hair upon the face and change of voice and manner do not occur.

(3) The sexual desire in adult women is rarely changed during the first few years after operation, although occasionally it diminishes subsequently.

As a result of the testimony of various eminent gynecologists and neurologists reported in the paper, together with his own personal experience, the author concludes that patients are frequently more nervous and often develop mental disturbances of various forms, insanity and epilepsy, after these operations. A beneficial influence is occasionally observed in cases of insanity and epilepsy associated with dysmenorrhœa, or recurring periodically at the menstrual epochs. In the more constant forms improvement is seldom noticed. Hystero-epilepsy is rarely cured, prolonged after-treatment usually being required. Neurasthenia associated with dysmenorrhœa or structural changes of the ovaries is occasionally cured, although in every case of this character treatment should be diligently tried before operative measures are resorted to. The removal of absolutely healthy tubes and ovaries for neurasthenia, hysteria, etc., is unjustifiable.—*Univ. Med. Magazine*, Dec., 1891.

**Lee (Chas. Carroll) on the Ultimate Results of Removal of Uterine Appendages.**—In the consideration of this subject there are two questions to be solved, and the answers to them should decide our action. (1) Is the removal of the appendages really necessary in this case; or will any combination of medical and hygienic treatment answer equally well? (2) Will the operation, even if successful at first, ultimately secure to the patients well-being and final restoration to health?

If we restrict our abdominal sections for the ablation of the appendage within the

limits thus implied, we will have little to regret and may confidently court criticism. As an aid to our selection and separation of cases, it may be said, in a general way, that with few exceptions neurotic cases are unsuitable for this operation; and this applies not only to the hystero-neuroses but to all epileptiform conditions as well. In solving the question of the real utility or inutility of ablation of the uterine appendage, cases should be followed up with unremitting care after they recover from the immediate effect of the operation.

With this view the writer sends annually a table of questions to every patient upon whom he has operated. Out of a total of about 110 cases of abdominal section done for this purpose alone he has full and accurate reports of 26 cases ranging from five to ten years since operation, together with a mass of others less accurately and regularly reported.

In reviewing the details of these cases (which the author presented in tabulated form) he refers to the following points:

(1) The relief of local pelvic pain was generally unsatisfactory for the first year, in many cases for two years, while after that time it commonly disappeared.

(2) The secondary local effects of the operation often seriously affected the patient's after-health. Among the untoward effects were: a continuance of menstruation with accompanying depression; perimetritis; cystitis; hemorrhage from hemorrhagic diathesis.

(3) The remote effects on the nervous system and general health were in the main excellent. The most satisfactory results came but slowly, usually after the lapse of one year. In no case where the operation was performed for purely neurotic conditions, has the patient become securely well.

(4) Mental depression or derangement as a remote effect of this operation was not observed.—*University Med. Mag.*, Dec., 1891.

**Goodell (Wm.) on the Radical Treatment of Uterine Cancer.**—Where the vagina and broad ligaments are uninvolved and the uterus free from adhesions, the results of extirpation of this organ are extremely satisfactory, comparing favorably with those of excision of the breast. Thus, of 311 cases of vaginal hysterectomy performed up to 1886, compiled by Martin, 47 died from the operation, giving a percentage of 15.1 per cent.

Leopold lost but 4 out of 80 and Staude 1 of 22. Out of 778 cases of excision of the breast collected by Koester the immediate mortality reached 15.6 per cent. The author is convinced that vaginal hysterectomy for cancer offers greater possibilities for remote or permanent success than operation for cancer in any other portion of the body. The success he considers in part due to the fact that the uterus is simply an appendage suspended by stays and guys of different material, while other tissues commonly invaded by the disease form integral parts and parcels of the body. Substantiating this view, he refers to the statistics of the Dresden Klinik brought up to date (*Med. and Surg. Reporter*, Nov. 21, 1891, page 834). Of 80 patients heard from over two years after the operation, 56.25 per cent. were still living and 45 per cent. were free from recurrence. As 8 deaths were not due to recurrence of the disease, the active mortality was only 17.8 per cent.

Leopold further reports out of 76 of his cases remaining under observation from one to five years after operation 72 were well and free from recurrence.

The vaginal operation is generally accepted as the best, provided the uterus is sufficiently small to be readily removed by this channel. A diversity of opinion exists, however, as to the technique of the operation. Some surgeons, notably Peau and Richelot, advocate the use of clamps to secure the broad ligaments, while others prefer ligatures of silk or catgut. The writer prefers catgut ligatures applied fresh from the alcoholic solution in which they are kept unmolested by water. He considers them less likely to slip off than silk; they can be cut off close to the knots and are absorbable, being less likely to remain foreign bodies. Furthermore, they are less likely to become contaminated and do not have to be removed, as is the case with silk. The technique which he employs in vaginal hysterectomy combines the best points of Martin's and Olshausen's operations.

The cervix is first curetted and cauterized and then packed with iodoform gauze and the lips sewed together by a continuous suture to prevent infection. Douglass' pouch is then opened, the edge of the peritoneum and vaginal mucous membrane united by quilted sutures of catgut to prevent hemorrhage, and the stripping off of

peritoneum during subsequent manipulations. A sponge with a string attached is then introduced to hold back the intestines. The uterus is separated anteriorly in a similar manner, the bladder being pushed up during the dissection. The broad ligament is tied off by a series of catgut ligatures, which are left long at first, and the uterus finally removed. The extirpation is somewhat facilitated by either retroverting or anteverting the womb, delivering the fundus either through the anterior or posterior opening, which twists the ligaments upon themselves, placing their upper portions within easy operative reach. The ovaries and tubes should be removed whenever possible, as they are likely to become involved in progressive cancer of the womb.

The uterus having been extirpated, the sponge is removed, the stumps drawn down on either side and sutured to either extremity of the vaginal incision, all ligatures being cut off close to their knots. A strip of iodoform gauze for drainage is pushed up into the pelvic cavity, and the vagina is loosely packed with gauze. The bowels are moved on the third or fourth day; after that both strips of gauze are removed. No douche should be used for at least a week. Three successful cases by the method recently performed were referred to. Although, as a result of former experiences, the author had abandoned the operation he is now a strong advocate of its performance.—*Medical News*, Dec. 5, 1891.

**Stamm (M.) on the Value of Draining the Pelvis with Large Tubes and Iodoform Gauze Strips in Case of Bleeding after Laparotomy.**—Three cases are reported in which strips of iodoform gauze, passed through a large rubber tube and packed over raw, bleeding surfaces, served the double purpose of checking parenchymatous hemorrhage and affording drainage.

The details of the method employed were identical with those described by Walcher, of Stuttgart, with the exception that rubber tubes were used instead of glass. The writer prefers glass tubes when they can be obtained. The iodoform gauze is used in strips of from one to three yards in length, the tubes acting to maintain pressure and afford ready outlet to the secretions.

In closing the abdominal opening the

sutures nearest the tube should be left loose, to be tightened upon removal of the drainage-tube at the end of about forty-eight hours. In removing the drainage the tube should be partially withdrawn and the gauze strip carefully drawn out through the tube.—*Columbus Medical Journal*, December, 1891.

**Keith (Skene) on an Example of Minor Gynæcology.**—A patient, aged thirty, the mother of three children consulted the writer, having been in poor health since the birth of her last child, three years previous. She complained of lumbar pains, menorrhagia, some discomfort and fulness in the rectum, and of occasional hemorrhage from the rectum, and dyspepsia. Examination revealed a subinvolved and retroverted uterus with lacerated cervix. The uterine cavity measured three and a quarter inches. Projecting from the rectum were several large internal hemorrhoids, which were first removed by means of the clamp and cautery. After the discomfort resulting from this operation had subsided, the uterus was replaced with a sound and a Hodge pessary introduced, the writer considering a sound, carefully used, fully as safe as the fingers in remedying a misplacement. After wearing the pessary for a month the uterus was reduced one half inch in size and the general condition was improved. Dyspeptic symptoms and headache persisted, and later a leucorrhœal discharge appeared, accompanied by a feeling of lassitude. The uterus was found somewhat retro-

verted, notwithstanding the pessary; the cervix had become somewhat eroded and the lips everted. Applications of carbolic acid and iodine were made with temporary relief. Later trachelorrhaphy was performed and the pessary reintroduced, the operation proving a complete success, and at the end of three months, when the pessary was removed, the uterus was found to measure only two and one half inches.

Three conditions were dealt with: First, the rectal hemorrhage; second, the pelvic congestion and headache due to the retroversion; and third, the irritation from the lacerated and indurated cervix causing leucorrhœa, subinvolution, which in turn favored the retroversion. The dyspepsia was considered a reflex symptom due to the cicatricial tissue in cervix. The necessity for the first measure was evident. Retroversion should be remedied when symptoms develop, but the cause should be treated rather than the symptoms. Lacerations accompanied by induration or by subinvolution demand operation. In performing this operation all the indurated tissue about the tear should be removed, it being borne in mind that some of the worst cases to deal with are those where an incomplete operation has been performed, leaving cicatricial tissue behind. The results when properly performed are particularly gratifying, women incapacitated for work on account of headache, lumbar pains, etc., being restored to perfect health.—*Med. Press and Circular*, Dec. 16, 1891.

## REPORT ON DERMATOLOGY.

BY CONDUCT W. CUTLER, M.D.

**Kenwood (H. R.) on a Rare Form of Skin Disease.**—The eruption mainly consists of wheals, which are sometimes six inches in diameter, and are generally discovered on the third day after the chill (that is to say, when the other effects of "the cold" have somewhat spent themselves). These may occur anywhere about the body; the lips and eyelids (especially the lower) are frequently attacked, and the pharynx is said to have been involved on an occasion during which I did not see her. Over the area on which a wheal is about to form, the following sequence of events has been invariably noticed by

both the patient and myself. The area at first suddenly assumes a slight red blush, sometimes bright like erythema, but generally of a somewhat dusky hue, and at this stage a faint "tingling" pain manifests itself. When the spot is rubbed by the patient or myself—and in all other cases the necessary friction or pressure is doubtless given by clothes, etc.—the centre rises, becomes blanched (relatively), and then extends rapidly by an indefinite border until it reaches the limits of its extension, by which time a faint red line is seen to surround a paler swelling. The tingling sensation is at all times slight, is greatest

in the stage immediately preceding the swelling, and then diminishes, to disappear entirely when the wheal has reached its maximum development. At this later stage there are no subjective sensations of any kind which would tell her of their presence so long as she remains at rest, and does not rub or press them. The swellings last in bad attacks two days; but they have come and gone in two hours, leaving in no case any trace whatever of their existence, and we have both succeeded in some cases, but only early in the attacks, in producing wheals by friction over areas which have appeared perfectly normal. Apart from the slight discomfort accompanying "the cold," the patient feels perfectly well and in good spirits.

What marks the case as one of exceptional interest, however, is the fact that some of the swellings have frequently assumed the characters of a condition which has been described (by Quincke and Rapin notably) as "acute circumscribed cutaneous oedema"—that is, there have been present, I may say in *most* attacks—three or four on an average—oedematous tumefactions of the skin and subjacent tissue, of firm and knobby consistence, with ill-defined borders, and possessing a slightly pale hue relatively to the adjacent skin; which tumors pit (almost imperceptibly, it is so slight), upon pressure. Their favorite sites are the skin over the deltoid muscle of the arm and that over the region of the buttocks. The swelling of the tongue which accompanied a recent attack was due to one of them. They have never been, in any case which I have had the opportunity of investigating personally, less than two inches and a half in their longest diameter, and have generally shown a tendency to assume an oval shape. The largest had a diameter of over six inches, and was situated upon the buttocks, with its centre over the tuber ischii. Their near relation to the urticarial wheal is manifest from the closely similar sequence of changes during their development; from the almost equal rapidity in which they appear and disappear, and from the fact that in this case a common cause induces both to appear. As in the wheal there is at first a blushing of the area, followed by rapid swelling, which quickly spreads the while it grows paler and becomes eventually surrounded by a slightly—very slightly—reddened zone of skin. The borders of these hard

swellings are not well defined, and almost evanesce into the adjacent skin, and there are no subjective symptoms accompanying them when matured, not even one of tension.

How unlike typical acute urticaria the condition is, even if the presence of the hard tumors be excluded, is at once manifest from the absence of all evidence of any, even faint, constitutional disturbances of the nature which generally accompany that condition; the number and size of the wheals, many of which quite reach in the latter respect the proportions found in "urticaria gigans"; the seasonal prevalence of the disorder, most marked in the winter, whereas in acute urticaria by far the greatest incidence of attack falls in the spring and summer; the extreme faintness of all subjective sensations, and their total absence after the swellings have formed; while in acute urticaria the itching, tingling, and pricking sensations generally occur *with* the eruption, in a marked degree, and there is a craving to scratch. The case appears to me to be a hybrid of three conditions: (1) Common acute urticaria, (2) urticaria gigans, and (3) acute circumscribed cutaneous oedema.—*London Lancet*, Jan. 9, 1892.

**Dockrell (M.) on the Relation of Seborrhœic Eczema to Other Diseases.**—To Unna belongs the credit of clearly pointing out the following diagnostic characteristics respectively of the seborrhœic and specific papule, and the modifications exhibited when they are combined.

#### *Syphilitic.*

1. Papule, dull or brownish red.
2. The presence of no regular serpiginous tendency.
3. No itching or smarting.
4. Size not bigger than a pea, maintaining average size.
5. Always sharply circumscribed.
6. Often quite smooth, merely surrounded by fringe of epidermis.
7. Attacks, in addition to head, genitals, and flexor surfaces, the lateral aspects of lower portion of trunk.
8. Answers promptly to a mercurial course internally.

#### *Seborrhœic Eczema.*

1. Papule, yellowish fresh color.
2. Presence of a regular, continuous, serpiginous tendency.



3. Presence of itching, and unbearable tightness.

4. Size various.

5. Not sharply circumscribed, except in special localities.

6. Never completely smooth, generally somewhat squamous, and often thickly scabbed.

7. Attacks head, face, chest between shoulders, scrotum, flexor surfaces of limbs, and over sacrum.

8. Only influenced by anti-seborrhœic remedies externally.

*Interlocking of Syphilis and Seborrhœic Eczema.*

1. Papules are wanting in specific syphilitic color, and look rather of a fresh yellowish red.

2. The arrangement of papules in serpiginously progressive circles and rings.

3. Whenever itching of greater or less intensity is present.

4. Separate spots of exanthem are of various sizes.

5. Not sharply contoured.

6. Perfectly smooth papules are absent, the greater number present being covered with scales and fatty scabs.

7. When eruption appears on confines between forehead and hair, in naso-labial furrow, on the sternum, between the shoulder-blades, or over sacral region, or when concentrated on hairy regions of body.

8. Whenever it presents an unusual obstinacy to mercurial constitutional treatment, but improves rapidly with application of antiseborrhœic remedies.—*The Med. Press*, Jan. 11, 1892.

**Carrier (A. E.) on Bald Heads.**—

Baldness, due to functional disturbance of the nervous system (some form of alopecia areata), usually ends in recovery. The brilliant results of treatment in some of these cases is entirely independent of any medication that may have been used. The tediousness of the recovery in other cases, and especially those in which the alopecia is universal, calls for varied and energetic treatment. Massage, two or three times a week, I have found of great benefit, also douches of hot water, followed at once by douches of cold water, and then using a solution of salt and water, following with application of some fat. Of great value is galvanism and faradization, using mild currents (two to four milliampères), in

five- to ten-minute séances every day. The various stimulants used in the treatment of alopecia pityroïdes will also be found useful. Cases may last for months, or even years, and should never be considered incurable as long as even the finest lanugo hairs are discernible. Cases due to traumatism, ending in destruction of nerve, are incurable, but taking all forms of nervous alopecia areata, we find they only form some twelve per cent. of all cases; the balance I believe to be parasitic, and in addition to other medication, call for parasiticides. It is found very difficult, in ringworm of the scalp, to bring the parasite and parasiticides together, although we know the parts attacked by the fungus, and, as so far we have not been able to locate the parasite of alopecia areata, treatment is largely empirical, but I believe the good effects of treatment by strong applications of the bichloride of mercury, (grains, five to ten to the drachm), and the stronger current of electricity, are due to their destroying the parasite. By all means epilate before using whatever remedy is selected. Blistering with oleate of mercury often gives good results.—*Trans. Mich. State Med. Soc.*, 1891.

**Dockrill (M.) on Treatment of Urticaria Papulosa.**—For children the details of treatment are: (1) Give a teaspoonful of syr. calcis lactophosphatis thrice daily; or, if history of asthma in parents, give ichthyol, from three to ten minims in water, according to age, thrice daily. (2) Wash the child night and morning in a hot bath with 5 per cent. hydro-naphthol soap. (3) After drying, apply freely an application of 10 per cent. hydro-naphthol in one ounce of vaseline to the parts affected; or, as I prefer now, 10 per cent. hydro-naphthol in one ounce of bassorin. (4) The case is usually well in from three to five weeks, unless complicated with scabies or pediculosis. It is better to advise a 1 per cent. hydro-naphthol soap, to be continued for three months. After a fortnight either increase or diminish the strength of the application, according to whether the patient is at a standstill or getting better. Only apply the ointment every second night, as soon as the child has been free from wheals, for a week, gradually leaving it off.—*The Lancet*, Dec. 5, 1891.

**Saville (T.) on an Epidemic Skin Disease.**—The disease was described as a universal dermatitis, sometimes attended

by the formation of vesicles, and always resulting in the desquamation or exfoliation of the epidermis, attended by a certain amount of constitutional disturbance, and running a more or less definite course of seven or eight weeks. The skin lesion commenced sometimes as a papular or papulo-erythematous rash, sometimes as raised maculæ, and in some rare cases as rings; but, however it began, the various elements became confluent in from three to eight days, and produced a crimson, irregularly indurated surface, which was continually shedding its cuticle in scales or flakes of various sizes, from impalpable powder to the entire cast of a hand or foot. If exudation were present this entangled the flakes of epidermis and formed crusts. A large proportion of the cases was attended by a serous exudation from the formation of vesicles, which were easily broken. By this feature Dr. Saville divided his cases into two groups, the "moist," type, to the number of 100, and the "dry" type, of which there were forty-five, eighteen being of a mixed type. Several independent areas would be involved at different dates, but they all ran the same course. This condition of things lasted for some weeks, several layers of cuticle being shed. By degrees the inflammation subsided, leaving the skin considerably thickened, indurated, and wrinkled. In many cases, the new skin presented a raw, parchment-like appearance, smooth and shiny, and sometimes cracked. The eruption most frequently started on the upper arm or forearm (thirty-seven cases), but almost as frequently on the face or scalp (thirty-five cases), twenty-four cases on the feet and legs, twenty-two cases on the hands, thirteen cases on the back, twelve on the neck, and a like number on the chest or abdomen. The eruption in most cases spread by contiguity to the neighboring parts, and in quite half of the cases the whole surface of the trunk and limbs was involved. The disease began and ended very gradually. In some cases it was preceded by lassitude and loss of appetite, and not unfrequently the eruption would make a false start. Convalescence was tardy, and thirty-eight of the patients had one or more relapses. Considerable irritation of the skin and a feeling of burning and itching were always present throughout the disease. Of the constitutional symptoms, anorexia and prostration

were the chief; feelings of lassitude and weakness were present in all cases; they were often profound, and in some the asthenia was fatal. The temperature remained normal, or even subnormal, excepting when a large extent of skin was involved, and the inflammation was at its height. The tongue was first coated, but soon shed its epithelium. In something like a quarter of the cases, vomiting or diarrhœa or both were present. The conjunctivæ were inflamed in all the severe cases, and in those where the face was involved. The other epidermal structures, hair and nails, shared in the disease in its later stages, and were shed. In 50 per cent. of the cases in which the urine was examined albumen was found, though permanent damage to the kidneys was not noted in any as a result of the disease. The mode of termination in fatal cases was sometimes by collapse consequent on the vomiting and diarrhœa, or more generally by the extreme weakness produced by the eruption. Some died comatose, as in uræmia. Dr. Saville connected two symptoms with a fatal issue—muscular twitching and embarrassed respiration, without physical signs in the lungs. Several of the cases were complicated with boils or carbuncles scattered about the body, and in some the skin remained pigmented for long after the eruption had subsided.

The clinical phenomena of the disease were alone almost sufficient to stamp it as contagious: its more or less definite course, the constitutional disturbance, the marked effect of germicides, the wave-like manner in which the outbreak had come and gone. Nevertheless, the contagion was evidently of a feeble kind, and seemed to require several important predisposing conditions, including old age and sickness, or "hospitalism," for its development.—*The Lancet*, Dec. 5, 1891.

**Cocks (E. L.) on Varieties of Lupus Vulgaris.**—There are several varieties of lupus vulgaris. Lupus maculosus commences as a yellowish-brown patch somewhat depressed, changes color slightly under pressure, and is surrounded by normal skin. The most characteristic point about the patch is its consistency, which is much less firm than the surrounding skin, so when a blunt probe is pushed against the mass it gives way while the normal skin resists the pressure.

In lupus exfoliations, the infiltration is deeper, which, by the pressure downward and spreading at the same time at the periphery, results in the destruction of the papillary bodies, so that the surface is scaly and fissured; the skin at the same time becomes thinned, thus producing the peculiar folding or wrinkling which gives it its name.

Lupus exulcerans is a more rapid and destructive process; the surface is covered with a thin yellowish crust; on wiping the secretion away the surface is found irregularly covered with granulations which are so soft and rotten as to be easily broken down.—*Weekly Med. Review*, Nov. 28, 1891.

**Wende (E.) on Ointments.**—The following properties are essential for a good ointment basis:

1. *Proper Consistency.*—It must be soft, smooth, and pliable, readily admitting of a uniform application.

2. *Homogeneity.*—It must be homogeneous, perfectly free from grittiness or irritating bodies, hard and crystalline.

3. *Durability.*—It must *not* show a tendency to change its physical and chemical peculiarities on exposure or long keeping.

4. *Miscibility.*—It must be capable of easily receiving the medicating ingredients to be combined or incorporated, in order to facilitate their absorption and action.

5. *Power of Imbibition.*—It must be capable of absorbing liquids, especially water, the importance of which can be best realized when a salt requires solution before being incorporated, as the iodide of potassium, etc.

6. *Limitation of Temperature.*—It must have a melting point somewhat higher than the temperature of the body. It may soften and become pliable, but must not liquefy.

7. *Inability to Produce Irritation.*—It must be perfectly bland and neutral in reaction.

Ointments may be considered as:

1. *Sedative*, when they counteract an inflammatory process, cool the burning, and soothe the irritation. They act mostly in protecting the diseased surface from the stimulating action of the air and moisture, and comprise the simple ointments, cold cream, lanoline cream, etc.

2. *Astringent*, when they counteract a lax condition of the skin. They are also soothing in their action. They act in modifying

inflammation and secretion by constricting the calibre of the capillaries and the ducts of glands. They include such substances as zinc, bismuth, lead, tannin, etc.

3. *Stimulating*, when they counteract a morbid process of the skin by setting up a new action, hastening nutritive changes, which re-establish the normal performance of its functions. They contain such ingredients as sulphur, tar, mercury, naphthol, resorcin, etc.

4. *Antiseptic*, when they counteract infection. They act by preventing putrefaction and fermentation, inasmuch as they destroy micro-organisms, restricting their growth and multiplication. They comprehend such remedies as iodoform, iodol, aristol, corrosive sublimate, carbolic acid, etc.

5. *Antiparasitic*, when they counteract the life, growth, and development of the various low forms of animal and vegetable life infesting the human epidermis. They act by producing direct impressions, which are poisonous to the parasite. Among them may be found styrax, beta-naphthol, mercury, balsam, Peru, sulphur, etc.

6. *Antipruritic*, when they counteract itching. They act, in all probability, by paralyzing the peripheral nerves, inducing locally an anæsthesia which relieves the over-excitation of the sensitive nerves, or by modifying an abnormal secretion or excretion. They include such remedies as carbolic acid, terebene, menthol, camphor, cocaine, etc.

A paste which we have found most soothing and bland in the treatment of infantile eczema, in modifying a simple dermatitis or in allaying irritation, is composed of:

℞.—Campho-phenique . . . 1.00

Bismuthi subnit.,

Zinci carbonatis,

Amyli,

Vaseline,

Lanolini anhydr., āā . . . 2.00

—*Buffalo Med. and Surg. Journal*, Jan., 1892.

**Ichthyol Varnishes.**—Unna, after various trials, has succeeded (*Monatshefte für praktische Dermatologie*, 1891) in presenting a formula for a rapidly drying ichthyol varnish, one that dries thoroughly. It is made up of 40 parts of ichthyol, 40 parts of starch, concentrated albumen solution 1 to 1½ parts, and water 20 parts. The starch and water are first mixed, the

ichthylol then incorporated, and finally the albumen added. A compound varnish of carbolic acid and ichthylol may be prescribed as follows : ichthylol 25 parts, carbolic acid  $2\frac{1}{2}$  parts, starch 50 parts, water  $22\frac{1}{2}$  parts. The ichthylol is incorporated with water by gently warming, the starch gradually added. Other varnishes containing pyrogallic acid, chrysarobin, resorcin, sulphur, etc., may be likewise made ; to these the addition of a small quantity of linseed oil is of advantage." The film or coating which is formed may readily be washed off with water.—*American Journal of the Med. Sciences*, Jan., 1892.

#### **Anatomy of Cheiro-pompholyx.**—

A. Winkelried Williams (*British Journal of Dermatology*, Oct., 1891) succinctly describes the clinical features of this much-discussed disease, as exemplified in the case under consideration. 1. Depression of the nervous system. 2. Vesicular eruption confined to the sides of the fingers and thumbs, which comes out suddenly accompanied by slight itching, consisting of minute vesicles imbedded in the epidermis, which resemble sago grains, increasing in size and becoming agglomerated. 3. They last about a week or ten days, drying up without rupture or exudation, followed by slight desquamation, leaving a surface sensitive and reddened. 4. Hands generally hyperidrotic.

Section of excised lesions show that a mild inflammatory action in the papillary layer results in an exudation of serum, which finds its way between the rete cells and leads to their compression, degeneration, and destruction, forming vesicles. The contents dry up and desquamate. The theory of the vesicles being dilatations of sweat ducts, as advanced by some observers, is disproved by these studies, as well as by those of Robinson of New York, and of Santi of Berne.—*American Journal of the Med. Sciences*, Jan., 1892.

**The Treatment of Eczema in the Different Hospitals of Paris.**—M. Hardy, of the St. Louis, considers the internal treatment to be of the greatest importance after the acute period has passed. Arsenic is the agent *par excellence*, and should be given in the form of arseniate of soda, one tenth of a grain once daily. The patients should further follow a *régime ad hoc*.

Prof. Fournier considers, on the contrary, that general treatment is of second-

ary importance ; the acute stage should be allowed to pass by as quietly as possible, emollients only being used to relieve the inflammation. When the secondary stage arrives, recourse should be had to zinc ointment and the wearing of caoutchouc. This latter has been too much neglected, and yet it is of great service. When the scrotum is attacked with chronic eczema, an india-rubber suspensory is the best treatment. M. Lailler treats generalized acute eczema by rest in bed, milk diet when there is fever, and saline purgatives, but orders no other internal treatment. He has a great preference for the caoutchouc envelope, which he considers as giving the best results ; it should be removed twice or three times a day, and wiped, and the body of the patient sponged with warm water, which was previously boiled. When the india-rubber is no longer to be employed, the skin should be rubbed over with vaseline, to prevent it from cracking. When the affection has passed the chronic state, he pays attention chiefly to the local treatment, and prescribes ointments of zinc, salol, coal tar, etc.

M. Brocq looks on the internal treatment as of considerable importance, and prescribes it according to the diathesis of the patient. In the strumous he orders cod-liver oil, or, where this is not borne, a syrup containing iodine and tannin and arseniate of soda ; in the rheumatic, alkaline waters (Vichy, Contrexéville, Royat) ; in the gouty, one to three a day for eight consecutive days every month, of the following pills : Chlorohydrate of quinine, 2 grs. ; ext. of colchicum powdered digitalis, of each one-fifth of a grain. The rest of the time he gives lithine with gentian. His local treatment consists in the following ointments, according to the position of the malady :

Calomel, i scr. ;	oxide of zinc, i dr. ;
Vaseline, vi dr. ;	
Yellow oxide of mercury, x grs. ;	
Tar oil, i dr. ;	
Vaseline, i oz.	(Limited to the joints.)
Naphthol,	
Camphor, aa,	} x grs. ;
Resorcin,	
Sulphur, i dr. ;	
Vaseline, i oz.	(Eczema capitis.)

—*The Med. Press*, Jan. 13, 1892.

**Bulkley (L. D.) on Treatment of Lichen Planus.**—In regard to the treatment, inasmuch as we know very little as to the real causation of the disease, it is

very difficult to give an intelligent explanation as to the lines to be pursued. The patients generally appear to be in good general health, and there is very little to take hold of in the way of rectification of supposed errors. We know, however, that the eruption is of a congestive and inflammatory nature, and it appears to be due to a suboxidation process closely akin to that found in eczema and other inflammatory diseases of the skin; and practically this line of treatment is that which is found to yield the best results. Indeed, when faithfully carried out, this is commonly very satisfactory.

The alkalies, given with a free hand, will not only serve to mitigate the suffering of the patient, but arrest the further development of the eruption; and of these, acetate of potassa, with nux vomica and a bitter infusion, after meals, have served me about the best. Constipation must, of course, be carefully avoided.

An empiric sort of a prescription was suggested by the elder Bœck, of Norway, when in this country some years ago, and was strongly recommended by Taylor, in his clear and practical article on the disease some time since; and this has also done me most excellent service in many cases. It consists in the administration of

from ten to twenty grains of chlorate of potassa, dissolved in considerable water, directly after each meal, followed in half an hour by twenty drops of dilute nitric acid, also well diluted. It was supposed to act as an oxidizing agent, promoting the assimilation of food, and the disintegration of effete substances.

After a cooling course with one of the above, a more tonic course is often required, and then nothing is better than the sulphate of iron, with sulphate of magnesia and sulphuric acid, in what is known in the dermatological world as Startin's mixture. Arsenic, in my hands, has been of very little use in this eruption; indeed, in the more acute stages, seems to aggravate the eruption.

In regard to diet, very little can be said, for we know so little of the causes underlying the eruption. But as it is an inflammatory affection, and associated more or less with a deficient oxidation process, the diet should be simple and nutritious, avoiding entirely stimulants and all food of difficult digestion, and also articles liable to undergo acid fermentation. Excess of sweets certainly has seemed to aggravate the eruption in my experience. —*Journal American Med. Asso.*, Nov. 7, 1891.

## REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY A. T. MUZZY, M.D.

**Clark (E. S.) on a Case of Injury to the Ear by a Stroke of Lightning, with Perforation of the Membrana Tympani.**—A man, thirty-four years of age, while driving with wife and child four months previous to consultation was struck by lightning on the left side of the head, passing down the neck and across the chest to the right arm, and thence to metal-work of the buggy. The horse and a cow standing near were killed, but the wife and child were uninjured. The attendant physician noted superficial burning of the auricle, burning of the drum, and a resulting otorrhœa that healed in ten days, leaving tinnitus and deafness. Hearing is  $\frac{1}{16}$ , auricle normal. After removal of purulent matter and cerumen, meatus normal, drum much congested and thickened, and under a scab just beyond the extremity of the manubrium a perforation

1.5 mm. across. Under appropriate treatment perforation closed and tinnitus ceased nearly.—*Arch. Otol.*, vol. xxi., No. 1, 1892.

**Sheild (A. M.) on a Case of Sarcomatous Growth in the External Auditory Canal.**—March 6, 1891, a young lady, who had suffered since childhood from left otorrhœa, presented herself with a history of pain and discharge. Four months before, a mastoid abscess had appeared on the posterior wall of the canal. Patient is pale and anæmic, with disagreeable cerebral sensations of the left side. Pain, with profuse watery, fetid, sanious perpetual discharge. Behind the auricle is a closed sinus. No mastoid tenderness, throat normal. External canal is nearly completely occupied by a pale gelatinous growth, of shape and size of a cherry; sessile, not very sensitive. By snare and forceps this was removed with

much oozing of blood. By April 6th a nodule the size of a pea had reappeared. Microscopic examination proved the growth to be true sarcoma. A second removal was decided upon, and performed, under ether, with strong bone curettes. During the operation, connection with the old mastoid process was opened and pus evacuated; and after cleansing, the galvanocautery destroyed as thoroughly as possible the entire bony surface of the cavity. After-treatment consisted of daily use of peroxide of hydrogen, and subsequently of sulpho-carbolate of zinc. General health greatly improved, and six months later no signs of the tumor's return are noted. It would be well to give the microscope a subordinate place in respect to accurately observed clinical facts. Rapidly growing embryonic tissue, as "fungoid" granulation, about necrosed bone presents appearances in structure not to be distinguished from sarcoma.—*Arch. Otol.*, vol. xxi., No. 1, 1892.

**Krotoschin (Alexander) on Anatomical Contribution to the Knowledge of the Development of Myopia.**

—Statistics show with great clearness the preponderance in educated classes of myopia, above all things in school. Here it continuously increases in frequency from the lower to the higher classes. Cohn found only 0.4% among 10,060 children of the first-year grade, in the last 63.4%. More accurate statistical studies prove that it is the lower grades of myopia that prevail in educated classes and that become stationary with the close of the age of growth, while the severer forms of myopia, the constantly progressive myopia with complications of eye diseases, such as choroiditis, fluidity of the vitreous, and the rest, occur just as frequently among uneducated and country people. Bad nourishment and severe constitutional illness are clearly traced as causes for progressive myopia. No one theory satisfies all cases.

Tscherning divides myopia according to symptoms as follows: (1) Physiological myopia due to too great a curvature of the cornea; (2) acquired myopia due to near work; (3) progressive myopia depending on hereditary causes. Stilling's measurements prove physiological myopia to be a rare condition. For even in the lowest grades of myopia a radius of curvature of the cornea is usually found which is greater

than that in emmetropes. The few exceptions to this rule rest upon inherited anomaly of development. Transitions between acquired myopia and hydrophthalmia are impossible for anatomical reasons, one being a sound eye and the other a diseased one. The clinical course also demands a sharp separation of the acquired myopia from hydrophthalmia. The former begins at a time of greatest ocular, as other growth, and ceases at its termination; the latter is found even among children, reaches a high degree in youth, and ends in many cases with such complications as excessive stretching and widening of the anterior chamber, separation of the inner from the outer nerve sheath, enlargement and spreading of the papilla; retina, choroid, and sclera are pressed fast upon each other from increased intra-ocular pressure; the choroid shows pressure atrophy, for no inflammatory changes can be shown in the vessels. Both forms have in common (1) the kind of refraction, in one the main feature, in the other a complication of secondary importance; (2) hypertrophy of Brücke's fibres in the ciliary muscle; (3) the sickle form at the comus.—*Arch. Ophth.*, vol. xxi., No. 1, 1892.

**Gould (Geo. M.) on the Statistics and Lessons of Fifteen Hundred Cases of Refraction.**—The first lesson drawn is that 93% of the whole practice was refractive, only 7% requiring treatment of diseases of the eye alone. 76% of all refractive cases were female; 24% of all were presbyopes. Leaving out all cases where there was intercurrent disease that might violate the refractive result, there remained 2886 cases, 77% of which were hyperopic, and 23% myopic. All refractive cases, save those so far presbyopic as to render its use unnecessary, were tested under the influence of a mydriatic. Of all these refractive cases, 58% had hypermetropia with astigmatism. Only 2% of all had simple myopia, and 18% myopia with astigmatism. The degree of ametropia showed that hyperopia was in two thirds of the cases of low degree, while in myopia high degrees were seventeen times more frequent than in hyperopia; that is, while 12.5% of hyperopes had an error over 2 D, 34.5% of myopes had a corresponding defect. And the same is true of the relative frequency of high and low degrees of hyperopic and myopic astigmatism. Another point

brought out by the careful study of the astigmatic cases was the fact that unsymmetrical forms are more frequent than it is generally stated to be, and that often cases are termed symmetrical that are really  $5^{\circ}$  and even  $10^{\circ}$  distant from the major axes—that is, in hyperopia from  $90^{\circ}$ , and in myopia from  $0^{\circ}$ .

As to insufficiency, both esophoria and exophoria are far more frequent with hyperopia; 89% of the first and 77% of the second. In general, experience has led to a rule that all hyperphorias of  $4^{\circ}$  and less should be corrected, and most esophorias of  $1^{\circ}$  and more with prisms. But to ignore all exophoria until forced to consider it after the patient has worn the ametropic correction for a considerable time; to perform tenotomy in decided strabismus, and then only after having worn ametropic correction for a time, and, if possible, with atropine in the non-squinting eye; to perform tenotomy for insufficiency only when of  $12^{\circ}$  or over, and when accompanied by decided reflex symptoms. As to full correction, sometimes hyperopia is over-corrected, sometimes artificial emmetropia is aimed at, but usually all defects save astigmatism are under-corrected. The worst error is to fully correct myopia; it might, perhaps, do in a farmer, but in the dweller of a city, never. Not only are headaches due to eye-strain, but chorea, insomnia, palpitation also.—*Four. Am. Med. Assoc.*, Sept. 19, 1891.

**Toeplitz (Max) on Symmetrical Congenital Defects in the Anterior Pillars of the Fauces.**—Symmetrical congenital defects in the arcus palato-glossi are rare. A young man twenty-three years old had when two years old measles, when five scarlet fever and pharyngeal croup with bilateral otitis media and cellulitis. He remembers the openings in the faucial pillars back to an early date, and his parents speak of noticing them at a very early date. He still suffers from otorrhœa and has been operated upon for nasal polypi and hypertrophy of the pharyngeal tonsil when fifteen years old. Examination shows symmetrical openings in the faucial arches, the right a little larger, higher up, and more remote from the margin of the anterior pillar. Their margins are smooth and without trace of cicatrization. The tonsils themselves are entirely absent. Below the right opening more

marked than the left  $\frac{1}{4}$  of an inch, is a slight indication of what might be considered a radiated scar, but resembles more radiated folds. Literature contains not more than six similar observations.—*Arch. Otol.*, vol. xxi., No. 1, 1892.

**Zimmerman (Charles) on a Case of Orbital Cellulitis and Primary Mastoiditis Interna Complicating Influenza: Opening of Mastoid Process; Recovery.**—A girl, ten years old, moderately well nourished, with a history of blennorrhœa neonatorum, and later adenoid vegetations of the naso-pharynx, was taken with symptoms of influenza, followed in two days by ptosis, some moderate conjunctivitis, and exophthalmus downwards and outwards of the left eye. Under iced applications the cellulitis subsided. But on the fifth day signs of mastoid inflammation appeared, with plugging of canal with epithelial masses. This process, with oscillations, progressed until thirteen days subsequently, when a thorough opening of the mastoid was made with chisel and spongy fungoid material scraped out with a Volkmann's sharp spoon. Under proper antiseptic treatment, healing promptly took place. The clinical features of the orbital cellulitis were dull pain in forehead and orbit, inflammatory swelling of the lids, especially the upper, deficiency of mobility, general or partial exophthalmus, and diplopia. If there had been tenonitis or effusion and irritation of Tenon's capsule, chemosis of the ocular conjunctiva would have been added to the symptoms.—*Arch. Otol.*, vol. xxi., No. 1, 1892.

**Sargent (Elizabeth) on Profound Affection of the Eyes in a Case of Pernicious Anæmia.**—Horner, of Zürich, found in the ophthalmoscopic examination of thirty cases of pernicious anæmia almost always very extensive retinal hemorrhages, and dilated tortuous veins; also marked whiteness of the papilla in contrast to the rest of the fundus. The following case presented severer symptoms than are to be found recorded in any previous literature. An Irish girl, 14 years of age, was admitted Nov. 16, 1889, to Children's Hospital, San Francisco. Had been healthy until a few weeks before entrance, though perhaps insufficiently nourished for three years previous. Presents a white, waxy skin, colorless mucous membranes, adipose tissue well developed, bowels irregular, and urine

normal. Blood from finger very thin and with very few corpuscles, and these small, and many of irregular outline. Anæmic murmurs over the whole chest, and roughness with the first sound of heart. Dulness over whole left lung; right, normal. Liver and spleen normal. No enlarged lymphatics. Frequent bleeding from the gums.

Both eyes were equally affected. Conjunctiva pale, sclera very white, cornea clear, pupils dilated and sluggish, refractive media clear; optic papilla prominent, with ill-defined outline and no vessels visible upon it; retina opaque bluish-white, with knuckles of veins seen here and there, numerous hemorrhages, and quite large;

vision = Sn. 1.5 at short distance. Dec. 22d., vision = perception of light only; fundus cannot be seen. Dec. 28th, profuse hemorrhage from mucous surfaces, and paralysis. Death occurred on Dec. 30th. Dissection of the eye showed macroscopically total retinal detachment, with large equatorial hemorrhage, anterior chamber filled with serous exudation. The retina has undergone optic degeneration both about the papilla and in the region of the ora serrata. The optic disk is greatly swollen, being 2 mm. high. The changes seem to be due to œdema and extravasation.—*Arch. Ophthalm.*, vol. xxi., No. 1, 1892.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

**Taylor (R. W.) on the Etiology of Chancroid.**—He reports various cases to illustrate that chancroid may begin where there is any solution of continuity of surface, provided it is infected by bacteria with or without sexual intercourse. He continues: In this clinical summary I have endeavored to present a general outline of the mode and peculiarities of development of chancroids appearing after sexual contact, and, as we say *de novo*, without sexual contact, or by accidental pus-contamination. The subject has occupied my mind for many years, and I believe that it is here presented in an accurate manner. I think that I have adduced evidence that proves beyond controversy that the assertions that a chancroid is always of necessity the result of chancroidal pus, and that if all the patients in the world suffering with chancroid would avoid contact with others until their malady got well, the disease would cease from off the face of the earth, are utterly false, and not at all in keeping with the present condition of our knowledge.

To sum up: What we call chancroid is the product of many varieties of pus derived from non-syphilitic and syphilitic subjects. It is therefore a hybrid, heterogeneous lesion, in all cases a septic ulcer, and in many instances simply an active form of wound infection. This septic ulcer in some cases originates *de novo* from the contact of pyogenic microbes with a raw surface, herpetic or eczematous ex-

coriation, a chafe, etc., sexual contact then having nothing to do with its development. As a general rule, this local infective process is more active in syphilitic than in non-syphilitic subjects. It follows, therefore, that so long as pyogenic microbes and tissue-predisposition exist, chancroids will be found upon the mucous membranes and integument of the human race.—*Medical News*, Dec. 5, 1891.

**Bidwell (L. A.) a Case of Vesical Calculus in a Female Child.**—The large size of the stone in a female child is remarkable, only a few cases being recorded. It is interesting to find that the nucleus was an oxalate and not a foreign body; indeed, I think that the frequency with which a foreign body forms the nucleus of a stone in females has been rather exaggerated. Thus, out of a series of twenty-four cases of stone in the female bladder, only five were attributed to a foreign body. At the present time the choice of operation for a stone of any considerable size in the female must lie between lithotripsy and the supra-pubic operation. The contracted state of the bladder and the impossibility of retaining any fluid in it seemed to contra-indicate lithotripsy. The extraction of the stone was difficult, owing to the small size of the part of the bladder uncovered by peritoneum. I had intended to suture the wound in the bladder, and merely to place the drainage-tube in the superficial wound; but as the edges of the wound had been



bruised during the extraction of the stone, I thought it best to leave the bladder quite open, and I do not think that convalescence was much retarded in consequence, because urine has ceased to come through the wound within one week. Unfortunately, owing to some gastro-intestinal disturbance, the wound broke down twice before soundly healing.—*The Lancet*, Nov. 7, 1891.

**Einhorn (Max) on Methyl-Blue in Acute Gonorrhœa.**—Twelve patients of the German dispensary, with acute gonorrhœa, were treated in no other way than by administering internally 0.2 methyl-blue, in a gelatine capsule, once a day, after supper; nearly all of them lost the burning pains in the penis they had had the next day. Of these twelve patients, nine have been completely cured within eight to thirty-five days (one each in eight, twelve, thirteen, and sixteen days; the other five in from three to five weeks). Among the remaining three, one derived no benefit whatever from the methyl-blue; in the two others the pain became lessened but the flow did not seem to become altered by this mode of treatment, and here use was made of the usual mode of treatment by injections.—*Medical Record*, November 21, 1891.

**Kreida (G. N.) on Gummata of the Biceps Brachialis, Kidney, and Epididymis, Simulating Malignant Tumors.**—The conclusions from a study of this case and the results of treatment are:

1. This man was undoubtedly affected with syphilitic gummata of the muscle, kidney, and epididymis, appearing ten years after the primary infection.
2. The first development of the disease was extremely mild, and beyond a very slight scar on the penis left no marks on any part of the body.
3. That the indifferent use of specific medication served to check the disease, and during the time of temporary quietude of the poison he was married and became the father of a son.
4. The son shows only slight manifestations of hereditary disease.
5. The disease afterward developing without treatment, his wife became affected, miscarried several times, and has finally ceased to conceive.
6. Despite the fact that no correct diagnosis of his trouble was made, and that

proper treatment was not applied, the disease ran rather a slow course, and now as a result of proper medication the man bids fair to make a complete recovery.—*Med. News*, Dec. 26, 1891.

**Taylor (R. W.) on Genital Chancres in Women.**—Author divides chancres in women into six varieties, illustrated by nine colored plates.

1. The superficial or chancrous erosion.
2. The scaling papule or tubercle.
3. The elevated papule or tubercle (ex-ulcerated), *ulcus elevatum*.
4. The incruusted chancre.
5. The indurated nodule.
6. The diffuse exulcerated chancre.

As a rule, all chancres of the female genitals are unaccompanied with pain. In some cases itching and burning are complained of, and in some chancres of the clitoris and fourchette severe pain is felt.

On the labia majora we find the incruusted chancre, the chancrous erosion, the *ulcus elevatum*, the diffuse exulcerated chancre, and the indurating nodule. In the tissues of these parts indurating œdema is very often observed as a complication involving large and small portions. This complication is also found as a result of secondary lesions—such as erosions and condylomata lata.

On the labia minora the chancrous erosion, the *ulcus elevatum*, and the diffuse exulcerated chancre are commonly found. All chancres on these parts may be accompanied by mild or dense induration, which may involve part or the whole of the structure.

Chancres of the fourchette are of the erosive, incruusted, or diffusely indurated type.

Chancres of the introitus vaginæ, meatus, and myrtiform caruncles are commonly ill-defined masses of induration which frequently present no characteristic appearance, and whose diagnosis is usually very difficult, and frequently only possible after considerable delay and observation. On these parts it is very difficult, often impossible, to determine the extent and density of the induration.

Chancres of the vagina are very rare. Clerc never saw one, and Fournier says he never saw one seated beyond the vaginal ring. Bockhart reports a case of chancre of the middle portion of the vagina which had developed upon an excoriation produced by a tickler in ultra-libidinous coitus. In

the treatment of chancres in women, too much attention cannot be paid to the matter of cleanliness and to the production of a dry state of the parts. In some mild cases simple lotions only are necessary. When the lesion is well developed, it should be constantly covered with mercurial ointment.—*N. Y. Medical Journal*, Jan. 2, 1892.

**Brown (G. E.) on Value of Bichloride of Mercury in the Treatment of Urethritis.**—Author quotes conclusions from a paper read before the N. Y. Dermatological Society, four years ago.

From an analysis of about 150 cases treated by these methods, he felt justified in drawing the following conclusions:

1. That in uncomplicated cases of acute gonorrhœal urethritis, treated by prolonged and frequent irrigation with bichloride of mercury, recovery may be expected within two weeks. That this period may be considerably shortened by the early inauguration of treatment, by absolute rest, and by the avoidance of stimulants; that it may be indefinitely prolonged by irregularity in treatment, by inordinate physical exertion, and by indulgence in alcoholic and venereal excesses.

2. That the retrojection of a hot solution of bichloride possesses all the advantages of the former procedure, and in addition causes a more rapid subsidence of the inflammatory symptoms, a greater feeling of comfort to the patient, and is attended with less annoyance and trouble.

3. That in cases of acute non-specific urethritis, the favorable influence of each of these methods is strikingly apparent.

4. That in cases of chronic purulent urethritis no agent produces such rapid and permanent improvement as irrigation, especially when combined with astringents and heat.

5. That the percentage of complications occurring in cases treated by these methods is far below that observed where the ordinary treatment is employed.

A year later Brown reported 102 additional cases with even more satisfactory results: inflammatory complications only 2 per cent., while in ordinary methods epididymitis alone 16 per cent. He has continued this method for the past three years, using the solution four 1-16,000 to 1-50,000, instructing patient to take twice daily, ten injections in A. M., and ten in P. M.

Although several hundred cases have

been treated by this method he only has histories of fifty-five cases, with five complications. Total 10 per cent. These statistics he believes to be as conscientiously prepared and accurate as any others gathered in the same manner, and from the same class of cases suffering from this disease; yet he believes them to be *absolutely worthless* from a scientific point of view, for even his limited experience in the treatment of urethral disease has taught him that the simple cessation of all discharge by no means indicates a cure of the disease; and he is prepared to say, without the slightest hesitation, that it is his belief that had a careful and thorough examination been made in each instance, at the time when he reported the cessation of all discharge, not one case of his three series would fail to show the unmistakable evidences of an uncured urethritis, which might, under favorable conditions, again become active and furnish a secretion which would be contagious.—*Inter. Four. Surg.*, vol. xi., 35.

**Ohmann-Dumesnil (H. H.) on Case of Intra-Urethral Chancroid.**—The author reports a case where he found a chancroid at a point corresponding to three eighths of an inch posterior to corona of gland,—associated with chancroids on gland and prepuce. His theory of its causation was that the infection had been carried back by the injection of a prophylactic fluid after intercourse. It has confirmed one lesson among others, viz., that a purulent discharge from the urethra is not necessarily gonorrhœal, any more than that a mucoid one is a symptom of gleet; and that an ocular examination should always be made.—*St. Louis Med. and Surg. Jour.*, Dec., 1891.

**Horton (E. A.) on Urinary and Anal Fistulæ.**—The author states, that the mucous membrane of the urethra and rectum are generally perforated from without, rarely by the escape of urine and fecal matter into the tissues.

Urethral fistulæ are generally due to local causes; anal fistulæ, from debility and disease. That the prognosis of anal fistulæ which begin by an ulcer of the mucous membrane is more favorable than when otherwise found.

Every effort should be made to prevent an abscess near the mucous canal from perforating its wall. This can be done only by an early and free incision when

the induration of the tissue is first manifest to the touch. The surgeon should not wait for the formation of pus.—*Mass. Med. Journal*, Dec., 1891.

**Robertson (E. B.) on Hypertrophy of the Prostate Gland, Retention of Urine, Cystitis, New Operation and Cure.**—Author reports case of an old man (sixty-eight years) with hypertrophy of prostate gland with retention of urine, in which he found only slight relief by palliative treatment, upon whom he performed the following operation :

Patient was placed in ordinary lithotomy position. I took up a scalpel previously wrapped with adhesive plaster to within about three-quarters of an inch of its point, placed it flat on the palmar surface of the index finger of the left hand with its cutting edge upwards ; both finger and knife being well oiled, were passed as far into the rectum as the finger could reach. Then, by depressing the handle of the scalpel, its cutting edge was caused to divide the anterior wall of the rectum, the areolar tissue, the fibrous sheath of the prostate, and into the substance of the gland from its base to its apex. Owing to the great enlargement from behind forwards of the gland the incision was about two inches in extent. The finger and knife being withdrawn, the index finger of the right hand was introduced, and its point insinuated into the incision ; the gland being fragile, it was easily torn into two about equal halves.

The effect of this operation, as was intended, was to permit the escape of blood and serum, and thereby deplete and reduce the gland ; and the division of the gland had the effect of removing the pressure from the urethra ; in all of which I was neither surprised nor disappointed, and perhaps more than satisfied.

After the operation the patient was given two grains of acetate of lead and one of opium, to confine the bowels for forty-eight hours, at the end of which time a large enema was administered, by which the bowels were reopened.

On the fourth day after the operation the prostate was found, upon examination, to be reduced more than one half in size, and the patient was passing urine voluntarily, and ten days later he went home quite well, and has remained so ever since.

I do not report this operation as infallible in all cases of enlargement of the

prostate gland, but I believe there are cases like this one, in which this procedure may be made useful ; and I have been thus minute in the details, that I may not be misunderstood.—*Pacific Med. Jour.*, Nov., 1891.

**Tobies on Prostatectomy for Senile Prostatic Enlargement.**—He condemned all those done through the urethra as coming under the head of fluid surgery, and being contrary to the spirit of the day. The method of operating which he had successfully practised he described as follows : The bladder having been explored by the fingers through a small suprapubic incision, and the case being one suitable for operation, a wire doubled and bent to a suitable curve is passed through the urethra into the bladder. A straight sound, arranged to receive the wire and act as an ecraseur, is then slipped up along it ; but its point, instead of being passed into the bladder, is made to impinge against the urethral obstruction. Next, the double wire lying in the bladder is opened into a loop and slipped over the enlarged lobe, and is kept embedded round its base by means of two fingers passed through the abdominal incision. While this wire is being made, by traction on it, to cut its way through the part it encircles, the inserted fingers, helped by the point of the catheter, pressed against the spot it is desired to reach, regulate its direction. The following are the advantages of this operation :

1. As much of the gland as interferes with the escape of urine is removed, and no more.

2. Such portion of it is removed in a satisfactory manner, for the wire starts from the point where the finger defines the obstruction on one side, and cuts up to the point where the instrument does so on the other.

3. A smooth surface, sloping into the urethra, is left instead of the more or less rough one that must result from taking away the gland piecemeal with a forceps.

4. There is very little hemorrhage.

No brilliant results are to be expected from any operation, and one should be undertaken only as a last resource. When dealing with youth we may talk of a cure, when treating the aged we may consider ourselves lucky if we succeed in making them a little better.—*Dub. Four. Med. Science*, Dec., 1891.

**Barling (Gilbert, B. S., F. R. C. S.,)** on Immediate Suture of Ruptured Urethra.—Author reports four cases of ruptured urethra, treated with immediate suture. In all cases he failed to obtain primary union; one case died from suppuration and pneumonia, the others of suppurative pyelo-nephritis. After dealing with unsatisfactory results of reported cases, he proposes the following plan:

Having done perineal section, and found both ends of the torn urethra, the catheter should be inserted into the bladder. Suprapubic section should then be done, and the bladder being opened on the point of the catheter the opening should be enlarged until it admits a large-sized drainage tube easily. The catheter should then be removed, and as many sutures inserted into the urethra as seem necessary; four will generally be sufficient for a complete rupture, one on the roof, one on each side, and one on the floor. The suture on the roof should then be tied, and as full-sized a catheter passed as the urethra will easily take, this to support the edges of the wounded tissue and to prevent them from unfolding. The remaining three sutures are then to be fastened, and the catheter removed with the utmost care, so that its point does not stick either into the roof or the floor of the sutured part.

It might be an advantage to retain the catheter for a few hours to act as a splint to the wounded urethra, but as already pointed out a little urine may trickle by it and get into the urethra, or, when the catheter is withdrawn, some of the reparative lymph may have stuck to it, and the drag on the tissues may tear apart the edges of the urethra; for these reasons I believe it will be best to remove the catheter. Experience has shown that though the torn ends may be widely separated they may be brought together with very little or no tension on the stitches.

Part of the perineal wound may be brought together with deep sutures, and the remainder left open in case of escape of urine there or of suppuration. Subsequently the suprapubic drain must be looked to to see that it is absolutely free, and it should be kept *in situ* for at least ten days, the bowels should be confined for a week to keep the perineal muscles quiet, and, all going well, a catheter should not be passed for three weeks.—*Birmingham Med. Review*, Dec., 1891.

**Bangs (L. Bolton) on Stricture of the Urethra and its Treatment.**—The author describes stricture of the urethra as an unnatural narrowing of the urethra in any part of its whole length. He considers the urethra as a living organ, supplied with muscles and nerves for the physiological purpose of taking away from the body the urine, and ejecting the seminal fluid. Anything therefore in the canal that will interfere with the proper performance of those duties, or that irritates the nerve relations, disturbs the harmony of the organ and must be regarded as pathological or unnatural. He makes the following statement: "I therefore reaffirm my belief in the proportionate relation of the human urethra to the size of the penis in which it is contained, and of the necessity that only by recognizing this principle formulated by Dr. Otis can we determine how to give radical and humane treatment for an infirmity that concerns so many."

He refers to divulsion as non-surgical, non-scientific; to electrolysis as an irritant producing inflammatory deposits when a current is used of sufficient strength to be effective.

"Gradual dilatation is sufficient for soft, non-fibrous strictures of the posterior urethra and of those of similar pathological structure in the bulbous urethra. It is also sufficient in some of the soft, not well organized strictures in the penile urethra that are practically but simple *adhesions* (?) of the surfaces of the mucous membranes; but for organized strictures I believe that some form of urethrotomy is preferable.

"For all strictures of large calibre *requiring interference* I advocate treatment by internal urethrotomy and thorough division, with as little cutting as possible, by means of an instrument that fixes and makes tense the stricture-tissue. The subject of strictures of small calibre demands closer differentiation. For simple, uncomplicated strictures, internal urethrotomy as already described is the remedy. If, however, the stricture be complicated by fistulæ, either in the penile urethra or in the perineum, or if there be indurated cicatricial deposits posterior to four and a half inches, I would advocate external perineal urethrotomy, in conjunction with internal urethrotomy. The former serves more than one purpose. It enables us to divide all stricture-tissue thoroughly and fearlessly, with a definite object in view, and enables us at the same

time to abrogate the functions of the diseased urethra by draining away the urine, drop by drop, without any effort on the part of the urethra or perineal muscles. Thus physiological rest to the whole region is obtained as certainly as we obtain physiological rest for a broken limb when we put it on a splint."

He advocates this treatment even after the beginning of renal degeneration. After relief of back pressure the kidneys resume their functions, as manifested by the diminution of albumen, the disappearance of casts, and by the improved general well-being of the patient.—*Medical News*, Dec. 12, 1891.

**Stewart (R. W.) on Two Cases of Prostatic Hypertrophy and Prostatectomy.**—Author shows two specimens illustrating the enlargement of the middle lobe of the prostate gland, resulting in an obstruction of the vesicle orifice of the urethra.

He then reports a case of prostatectomy by the primal route, removing the portion projecting into the urethra. The patient made satisfactory recovery.

In speaking of the treatment of hypertrophy of the prostate he lays great stress on the use of the soft-rubber catheters in preference to the long curved silver catheters, but when the retention of the urine

becomes a marked feature and catheterization difficult, the propriety of removing the obstructive portion of the prostate should meet with favorable consideration.—*Am. Lancet*, Sept., 1891.

**Simmons (Geo. H.) on Stricture of the Urethra, its Cure by Painless Dilatation and by Electrolysis.**—The author gives a history of one case of stricture of urethra dilated under cocaine from 17-32 at one sitting by his own gleet olives. Two months later patient had had no trouble, and he passed 30 easily.

Also history of case treated by electrolysis. Since then he has treated five cases by electrolysis with cure in three cases. After referring to different methods of treatment, he stated that he should hereafter confine himself when possible to electrolysis and dilatation with short sounds. In closing I wish to call attention to the advantages I claim for my set of olives. In one set of instruments there is: 1st, a set of bougie à boulé for locating stricture; 2d, a set of sounds for curing stricture by dilatation; 3d, a set of electrodes for curing gleet with electrolysis; and 4th, a set of electrodes for curing stricture with electrolysis. They were made for me by H. C. Sample, of Chicago.—*Four. Amer. Med. Asso.*, Dec. 12, 1891.

## MISCELLANEOUS.

**Briscoe (J. E.) on Orchitis Following Influenza.**—On December 20, 1891, I was called to a patient, W. W.—, aged thirty-two, out-door laborer. He had been ailing for five days, worse the last two, but had continued working up to the afternoon of the previous day. He complained of pain in the joints and back, and had a white-coated tongue. Temperature 101.6° F. He had had no headache; and a chronic cough, which had been worse some days before, was now much better. Bowels open; lungs and heart normal. He mentioned that two days previously he noticed pain in the right testicle, and the day before (December 19th) found it swollen. On examination I found it enlarged and tender, but neither so large nor so tender as is often observed in cases of acute orchitis, there being no effusion into the sac, and no epididymitis. In the absence of symptoms or likelihood of gonorrhœa, of history of injury, and of parotitis, I was

at a loss to explain the orchitis, except as an unusual but possible concomitant of rheumatism. The patient was ordered to support the scrotum, to take light diet, and given salicylate of sodium in ten-grain doses every four hours.—December 22d: patient up; pain in back gone; temperature normal; testicle improving, but still slightly painful on pressure. I omitted the salicylate and gave a mixture of tincture of nux vomica, compound spirit of ammonia, and chloroform water.—27th: Convalescent but weak; all swelling and pain in testicle gone.—January 4th: Returned to work.—*London Lancet*, Jan. 23, 1892.

**Chaplin (A.) on Ulcerative Endocarditis of the Pulmonary Valve.**—At a recent meeting of the London Pathological Society, the author exhibited a specimen from a patient with the following history:

She was a waitress, aged eighteen, and was admitted to the hospital on August

11th, complaining of great dyspnoea and palpitation. On admission she was found to be very anæmic, and the temperature was between 99° and 100° every evening. The pulse was 126, the respiration 30, and the urine natural. On auscultating the heart there was heard at the apex a blowing systolic murmur, conducted round some way into the axilla; and over the pulmonary artery there was a loud systolic bruit, followed by a short diastolic murmur, which was conducted across the sternum to the right. The right side of the heart seemed to be enlarged; the lungs were healthy. On August 25th severe pyrexia set in, the temperature rising to 104° or 105° every night, and this hectic character of the temperature was persistent until the end of the case. On September 1st the spleen was noticed to be enlarged; on the 23d and several times afterwards the skin became spotted with a petechial rash, which disappeared after a few days. The murmur at the base altered from time to time, sometimes becoming more distinct than at others. On October 14th the patient had hæmoptysis, half an ounce of blood being brought up, and crepitations now appeared at the bases of both lungs. The pulse and respiration increased in frequency, and the patient died on November 11th. At the necropsy the pulmonary artery was found filled with a vegetation adherent to the wall of the artery and joined to a small vegetation upon the pulmonary valves. There was a small vegetation also on the mitral and aortic valves. The lungs showed puckered scars at the base and a recent infarct at the right base. There were no infarcts in the spleen or kidney. The attacks, he thought, were due to increase in the thrombotic mass.—*London Lancet*, Jan. 23, 1892.

**Jeaffreson (C. S.) on the Influenza and Smoke.**—The writer having suffered severely from the influenza, examined the bronchial mucus from his own lungs. Using a Zeiss  $\frac{1}{2}$  oil immersion, he found that micrococci, which may not infrequently be found in small numbers, were exceedingly prevalent in the discharge. What, however, he desires particularly to call attention to is the following fact: He lives in a very smoky district of a very smoky city, and naturally much carbon enters the lungs in the form of finely divided smoke and coal-dust. For some reason this carbon is not equally scattered throughout the bronchial secretions, but becomes ag-

gregated into comparatively dense patches. Now, wherever these carbon patches were the most dense, there were the micrococci most numerous, sometimes being concentrated in such quantities as to form a zoogloea-like mass of carbon and cocci mixed.

The conclusion he drew from these examinations, which were frequently repeated, was the fact that carbon in a very minute state of subdivision may, and probably does, favor the development of certain forms of micro-organisms. He is not prepared to say that the micrococci he saw were pathogenic, but it is clear that if they were so the conditions favoring their development are specially to be found in our large and smoky cities; and thus we may to some extent account for the increased mortality from epidemic diseases of the respiratory organs when they occur in these localities. Living amongst a mining and coal working population he has long had an idea that there was some cause which rendered them specially liable to diseases of the respiratory tract, especially when these occur in an epidemic form; also to other infectious and suppurative diseases which are now generally supposed to bear some relation to the existence of certain micro-organisms. Perhaps it is in the direction above suggested that it may be found. His attention is daily directed to the extraordinary frequency with which the most trivial corneal wounds lead to destructive suppuration, not in the subjects of broken down and diseased constitutions only, but in vigorous young men in the prime of life. These disastrous results are quite out of proportion to anything met with in the same class of accidents occurring in the ordinary civil population, and must have some special cause. Possibly it may lie in the direction of the influence of carbon in a state of minute subdivision upon the development of micro-organisms, if this can be established as a fact.—*London Lancet*, Jan. 23, 1892.

**Wells (F. B.) on the Filtration of Urine through Earth.**—The writer reports the results of a series of experiments made under the direction of Dr. Poor. A conical metal vessel, capable of containing about forty pounds of dry earth, and perforated at the apex was used as a filter, and to this was added day by day an amount of urine averaging half a pint. Dr. Poore appends a note to the article in which the results are thus summarized. The power

of the earth to deal with organic matter is one of those things of which we have only recently obtained an insight, an insight which we owe to the new science of bacteriology. I am not aware that any experiments similar to the above have yet been published. Although the experiments are tentative and incomplete, the results obtained are of undoubted interest, and I would venture to call attention to four facts: That the filtrate obtained from the filtration of urine through fresh earth was always a much thinner fluid than the urine added, the bulk of the solids dissolved in the urine having been left behind in the earth. 2. The filtrate showed no tendency to putrefy, and certainly contained no putrefactive organisms, for it was shown to be incapable of starting putrefactive changes in urine which had been previously sterilized. 3. The filtrate could in all cases be evaporated to dryness without giving off offensive odors, offering in this particular a great contrast to pure urine, which invariably emits most disgusting odors when evaporated to dryness. 4. The organic residue left in the earth apparently underwent nitrification in course of time, but it was noteworthy that earth which had been used for the filtration of relatively a very large amount of urine was in all cases barren until after it had been exposed to air and rain. After such exposure, however, its fertility appeared to be of a high order. The practical importance of this matter to sanitarians and agriculturists is very great.—*London Lancet*, Jan. 2, 1892.

**Ogle (J. G.) on Enteric Fever in a Child Four and One Half Months Old.**—The child, one of twins, had been healthy from birth and had been fed on condensed milk. On September 11th she was vaccinated, and since then had been vomiting, but did not appear to be ill. On September 17th the mother went to her work in the morning, leaving the child, apparently well, in the charge of a friend; in the evening, on her return, the child was in the mortuary at St. Bartholomew's Hospital. The friend stated that on the morning of the 17th the child was very fretful and vomited frequently; she got worse in the afternoon, and died on the way to the hospital. The bowels acted on the 17th, and the motion was solid and lemon-colored.

*Post-mortem Examination.*—The body

was fairly nourished, but there were marked evidences of rickets. No signs of violence were found. The vertex of the brain was somewhat ecchymosed, and the left lateral ventricle contained a considerable excess of fluid. The intestines presented the appearances typical of enteric fever. The Peyer's patches were swollen and reticulated, and many of them, especially in the lower part of the ileum, were converted into ragged ulcers. The first ulcer occurred about twenty-four inches from the stomach, and they were of circular shape, and about four inches apart in the jejunum. In the ileum the ulcers were much more numerous, and assumed an oval form, with the long axis in the long axis of the intestine. The mucous membrane of the colon was covered with minute inflamed solitary glands, which were ulcerated in the ascending portion. There was no peritonitis or perforation. The stomach was empty and the mucous membrane healthy. The mesenteric glands were enlarged. The spleen was large and soft. Murchison makes mention of three cases in younger infants, viz., eight days old, fifteen days old, and in a fœtus of seven months.—*London Lancet*, Jan. 2, 1892.

**Stephenson (F. B.) on Unequal Pupils.**—The patient is a robust man, aged thirty years. The history of the case does not give any certain cause, though he had severe headaches when about six years old. The condition was first noticed near twelve years of age. The eyes are both hazel in color. The right pupil is habitually twice the size of the left. Vision in the right eye is somewhat less clearly defined than in the left during the day or in the light. Vision in the left eye is a trifle less clearly defined than in the right during the night or in the dark. Otherwise visual power is good in both eyes. No astigmatism. Pupils react to eserine, atropine, light, and darkness.—*Bost. Med. and Surg. Jour.*, Sept. 3, 1891.

**What Modern Therapeutics may Lead to.**—The fertility of the therapist's brain, the child-like simplicity of his faith, and the perpetuity of his apian industry and perseverance amid failures and disappointments, were amply illustrated at the recent Tubercle Congress held in Paris. No sooner is an animal found to be immune against a certain disease to which man is susceptible, than an attempt is forthwith made to transfer its nature by blood trans-

fusion ; and in the future when Dr. Chien's patients, who have been made watchful and servile by having their blood diluted with dog's blood serum, and those of Dr. Geiss who fills their veins with goat's blood, which renders them agile and obscene, yet dignified and venerable-looking, meet on the highway the pompous, arrogant, and inflated patients of Dr. Cock, who, fed on rooster salad, grow fat and sleek, together with those of Drs. Asinus and Morueco, there will be such a barking, braying, bleating, braying, and crowing as was never heard in the world's history since the disembarkation of the animals after the stranding of Noah's ark.—*Pac. Med. Jour.*, Oct.

**Quinquand on the Treatment of Psoriasis.**—The author makes particular mention of bicarbonate of soda, which must at times be given in large doses, say 5 to 10 grammes, at meals. Patients accustomed themselves very well to it, and it can be stopped should the doses employed cause loose bowels. For these doses the alkaline waters are unavailable, as the large amount of fluid necessary to furnish the quantum of salt would be debilitating.

Provided one employs locally the glycerole of cade, Quinquand recommends the addition of a little of the extract of Panama wood, 5 or 10 parts to 100. This preparation is preferable to the ordinary glycerole.—*Jour. de Méd. et Chir.*, Oct. 10, 1891.

**The Sense of Taste in the Larynx.**—For many years it has been known to histologists that the specific end-organs of taste, namely, the taste-bulbs, occur on the posterior or inner surface of the epiglottis, but up till now the physiological proof of the existence of the sense of taste in the epiglottis has not been forthcoming. Michelson, under Langendorff's direction, made a number of experiments which show that the inner surface of the epiglottis is endowed with taste. A Schroetter's laryngeal sound, tipped with a solution of quinine or saccharin, was introduced into the larynx, and the drop of the sapid substance was cautiously brought into contact with the inner surface of the epiglottis. Positive results were obtained, which were controlled by the sensation—electrical taste—known to be produced by electrical stimulation. It seems, therefore, proved that a part of the nerve fibres passing to the larynx are nerves of taste.—*Am. Pract. and News*, Oct. 10, 1891.

**MacFarlane (N.M.) on Infectious Gastric Catarrh.**—The writer reported two years ago the particulars of an epidemic in which about fifty cases were attended, and they were distributed over an area of two miles. The ages of the children attacked ranged between one and seven years. The disease began with a heaviness and listlessness for a day or two, followed by vomiting, anorexia, fever, accelerated pulse, and considerable prostration. There was an increase of temperature in all the cases, and in the worst it went as high as 103° F. The abdomen was tense and very painful on pressure, and the child objected very much to being moved. There was generally constipation, but in some few cases there was slight diarrhoea. The tongue was furred with red tip and edges.

Another constant symptom was bronchitis. It appeared early in the disease, generally within the first twelve hours, and was usually of a mild and transient nature ; but in some cases it was very severe and retarded recovery considerably beyond the usual time. Herpes labialis was present in the majority of the cases. The disease, which was very amenable to treatment, ran a course of three to four days, unless retarded by severe bronchitis. The outbreak commenced simultaneously in different parts of the district and lasted five weeks. Generally a child between two and three years of age was the first affected in a family, and it spread to the others, first one being seized and then another. It likewise spread to neighboring families, and pursued a similar course, and so on until it had visited all the houses round about. The weather during the outbreak was mild—exceptionally mild for the time of year—with little sunshine and a moist atmosphere. An epidemic of typhoid fever of a mild type was prevalent in the district at the same time. The second epidemic occurred four months after the first. It was milder in nature, shorter in duration, and localised to a small village containing about one hundred and fifty inhabitants. As before, children between the ages of one and seven only were affected ; and the symptoms of the disease in every way were identical with those in the previous outbreak.

A child, eighteen months old, residing in the centre of the village, was the first to turn ill, and from this primary source of



infection the disease spread to almost every child in the place. The weather at the time was dull and wet, and with little sunshine. In the cases—members of three families—the symptoms were as before described, but the disease in one house was not limited to children, but affected the adult members as well, and in them it was most severe. As to the cause of the outbreaks it would be difficult to determine, and one can only theorize. We all know how an ordinary cold, for some unaccountable reason, at times assumes an infectious nature; and, if with the respiratory tract, why not with the gastro-intestinal? In the epidemics described, the writer is inclined to think that the atmospheric conditions were favorable to the production of a gastric and respiratory catarrh. This in one or more cases assumed an infectious nature, and so became epidemic.

The treatment was simple. Many of the cases got well on a mild aperient, and in the severe cases a powder of half a grain of calomel with one of compound ipecacuanha powder, to relieve the abdominal pain, and a saline mixture, were all that were required.—*Provin. Med. Jour.*, Nov. 2, 1891.

**Mc Govern (W. P.) on Actinomycosis.**—The patient, J. H., was first seen August 30, 1891. Examination revealed a swelling occupying the angle of the lower jaw on the right side. This swelling, the size of half a lemon, was dense to the touch, gave no fluctuation, and was surrounded by an ill-defined mass of infiltrated tissues, extending in all directions, but more particularly downward and backward over the sterno-cleido-mastoid muscle. The skin was red over the central portion of the tumor, but there was no tenderness on pressure. The mouth and teeth showed evidence of lack of attention, and the last molar on the right side was carious, but had not ached.

On July 27, 1891, the patient first noticed a bean-like swelling opposite the angle of the jaw. This steadily increased to its present size, without becoming painful, tender on pressure, or giving rise to fever. The patient's condition was good, though he had of late lost considerable in weight. No positive diagnosis being made, expectant treatment was adopted.

On September 7th, a soft spot was found at the centre of the tumor. Incision evac-

uated about one teaspoonful of a gruel-like matter, containing numerous yellowish-white bodies. A diagnosis of actinomycosis was then made, which was soon confirmed by microscopic examination.

The patient was seen daily either by myself or by my associate Dr. E. R. Moras, and the abscess-like cavity was syringed out, with either a solution of tincture of iodine in alcohol, or a 1 : 1000 solution of bichloride of mercury, or a 5 per cent. solution of carbolic acid, and packed with gauze. I extracted the carious tooth on the 16th. Two actinomyces-bodies were found in one root, and one other was lodged in its cavity.

On September 24th, the cavity in the cheek, and as much of the surrounding indurated tissues as could be reached, were cauterized with the nitrate of silver stick. When the patient returned on the 27th, the change was surprising; the cavity was practically obliterated, and already the induration was markedly less. A mass of spongy granulation-tissue protruded from the wound, and by pressure a slight amount of the characteristic actinomycotic fluid could still be obtained. The cauterizations were repeated every third or fourth day. The improvement was unexpectedly rapid and pronounced. The last application was made on November 8th; on November 15th the patient was discharged cured, only a small scar remaining.

The patient has been seen several times since, and nothing suspicious has as yet developed.—*Phil. Med. News*, Jan. 23, 1892.

**Wallace (J.) on Erysipelatous Eruption from the Local Use of Atropia.**—Chas. McC., age forty-five; R. E. vision  $\frac{1}{8}$ ; L. E. vision  $\frac{1}{8}$ ; hypermetropia of 2 D in each eye with astigmatism; atropia was prescribed for the purpose of correcting his astigmatism. He had been told before, by Dr. R. M. Girvin, never to use belladonna, on account of the severe reaction which followed the application of a belladonna plaster to the chest for some inflammatory affection; this information was acquired by us, after the symptoms were in full development. The face presented the following conditions: The skin over the eyelids and upper part of face was swollen, dark-red in color, and of a tense, brawny feel; the eyes were closed by the swollen lids, a profuse discharge came from the inner canthus; the lachrymal

ducts seemed to be obstructed and swollen, but careful examination excluded this. The cornea was clear and not affected; the conjunctiva was slightly catarrhal. The symptoms manifested themselves shortly after the first drop had been instilled, and continued to increase in severity for twenty-four hours after the discontinuance of the atropia. The treatment pursued was to touch the conjunctiva with a solution of bichloride, 1-1,000, and wash the eyes with a solution of boracic acid. The recovery progressed rapidly, and the refraction was determined in a day or two after the symptoms had abated sufficiently to allow the man to open his lids.—*Univers. Med. Mag.*, Jan., '92.

**Burrough (E. Y.) on Basilar Meningitis after an Injury to the Head.**—A sailor, aged twenty-three, native of Denmark, was, with others, hauling on a watch-tackle when the hook of the distant block broke off, and the block, flying back, struck him on the left parietal region with considerable violence. Although the skin was scarcely broken, he appeared to suffer great pain at the time, but after a few minutes seemed relieved and resumed his work. He did not "lay up" on account of the blow, or, as far as is known, did he suffer any further discomfort from it until the beginning of his fatal illness, which was undoubtedly the result of the accident.

Five weeks later he began to feel hot and cold, to be very constipated, have headache, and a pulse of 120. Delirium of an active type developed in twenty-four hours. At times he was rational, but the severe headache continued. The next day relaxation of the sphincters was observed. At this time he was comatose, his eyes wandering about restlessly, and he took no notice of the hand passed before his eyes. The conjunctival reflex was absent; the patellar reflex was present in both legs; the ankle-clonus was present, and equally good in both ankles. No strabismus was apparent. The point of a penknife drawn across the soles of his feet elicited no response. On pressure there was a slight gurgling sound in the right iliac region. On the abdomen were some spots resembling those seen in cases of typhoid fever, but they disappeared on pressure.

Late in the evening, strabismus was noticed for the first time, as well as paralysis of the alæ of the nose. Opisthotonos was well marked. The patient now lay with

his head turned toward the left side, and there was constant twitching of the right arm and leg. He died early the next morning.—*N. Y. Med. Jour.*, Jan. 9, 1892.

**Donahue (M. D.) on Fatal Poisoning by Potassium Chlorate.**—P. G., laborer, aged thirty-six, on October 17th, last, while under the influence of alcohol, asked his sister for a dose of medicine to relieve the excessive costiveness from which he was suffering. By mistake two large tablespoonfuls of chlorate of potassium were given, shaken up in a tumblerful of water. Several glasses of beer were drunk by patient shortly after taking this dose.

Four or five hours subsequently violent vomiting set in. There were great pain and tenderness in the epigastrium, and intense pain complained of over the region of the kidneys. There were constant hiccup, great irritability, and querulousness, and inability at first to pass any urine. Ten hours after I first saw him, and eighteen hours after the ingestion of the poison, about three drachms of dark, dense urine were passed; on heating, it gave as complete a transition into albumen as might be expected on boiling the serum of a pleuritic effusion. A decided jaundiced hue was soon noticed to pass over the whole surface of the body, the lips and eyes becoming cyanotic. The pulse, except toward the end, was about 84 in frequency, but weak, compressible, and gaseous. Amid a general aggravation of all the symptoms, and especially of the restlessness and irritability, the patient passed away October 24th, one week after the poisoning. Post-mortem was refused. Treatment consisted in the use of gastric sedatives, stimulants, and mild unirritating diuretics, but no beneficial result whatever was obtained. The stomach-pump was used when patient was first seen, but as eight hours had elapsed from the taking of the poison very little of the latter was found in the glairy mucous fluid which that instrument removed.—*Univers. Med. Mag.*, Jan., 1892.

**Parker (W. W.) on La Grippe, a Cerebro-Spinal Neuralgia.**—I saw, in January and February last, about two hundred and fifty cases, and feel authorized to say that it is, in my opinion, a neuralgia of the brain and spinal marrow. The blow is always felt in the brain, but the effect upon the spinal system is not so constant

and well marked. The intercostal nerves were very often affected, while the lower extremities escaped. My own attack was somewhat peculiar. I was returning home on horseback, and when within a half mile of my office I felt a sudden vertigo. It increased rapidly, and I was about to dismount and go into some friend's house on the street, but the head symptom passed off in less time than it takes to tell it, and I then felt a decided tingling in the three outer toes of each foot.

After dismounting at my office, I felt a flushing of my face and head, as if I had taken a full dose of brandy. This continued, but did not increase, for four or five hours; indeed, until I went to bed.

The sympathetic system of nerves was not so much affected. The digestive tract often escaped entirely, the patient's appetite not being impaired at all while the attack was on.

It has occurred to me that one lesson may be learned from this singular visitation, and that is, that La Grippe is a test of the soundness or unsoundness (especially) of the nervous system. If you had a slight attack it is a proof that your constitution is sound; if a bad attack, your constitution is defective or bad. I could give quite a number of facts in support of this idea did time and space allow. A number of feeble old people are suffering now from effects of the attack in January. Phthisis in some young people has developed where I did not suspect that it existed.—*The Medical World*, Jan., 1892.

**Standler (E. L.) on a Case of Annual Shedding of the Nails.**—The patient was an adult married woman who had been treated without avail by several physicians. On examination I observed that the nails of all ten of the fingers were just becoming loosened, and were in reality being shed off. The skin was dry and scaly on the ends of the fingers and in the palms of the hands, most of which had already come off, leaving the surface quite red and tender. I found by inquiry that the toes were in the same condition, and the feet were so tender that only a large slipper could be worn with any degree of comfort. This was in August last; and now, after the lapse of three months, the new nails are about complete. She tells me that in August, 1880, she had a severe attack of typhoid fever, being confined to the bed for over two

months, but finally making a good recovery. But in August the following year (1881), on coming into the house and taking off the gloves, her fingers began to burn, and it extended to the whole body; the surface became very red; quite considerable fever, and dry, harsh skin; intense thirst, lasting for more than twenty-four hours; occasional chilly sensations; tremors; sick stomach; vomiting. After which the nails were all simultaneously loosened, desquamation occurred, and the skin remained red for some time. The nails having loosened from the matrix, gradually grew off during the space of about three months. This strange phenomenon has occurred, she tells me, in the month of August every year since, and about in the same manner as above described. Treatment of various kinds from various physicians has thus far availed nothing. Simple vaseline gives more relief than anything that has been used.

I consider this a very unique case, and one seldom met by the physician. I confess that I am at a loss to know why it should occur in this way; and why it should have followed in one year a spell of typhoid fever, and why the recurrence should continue.—*Am. Med. Jour.*, Dec., 1891.

**Freund on Blood Coagulation.**—Freund has advanced a new theory on the coagulation of blood. He reviewed the present theory of blood serum and transudations, which are supposed to contain fibrogene and fibrinoplastic substances, which have been separated and experimentally proved to be the fibrine ferment in the clot. Freund endeavors to disprove the correctness of these experiments by pointing to the absence of adhesion of the blood corpuscles in the living vessels. The blood does not adhere to the healthy wall of a blood-vessel, and if it be conveyed from this vessel by a cannula anointed with fatty matter or drawn by one covered with vaseline the blood can be let out and remain uncoagulated. If the blood be whipped with a glass rod not anointed it will rapidly coagulate. These facts have been confirmed by other experimenters, and Ludwig himself obtained blood in this manner several years ago, which he demonstrated to the *Doctoren-Collegium*. The cell element of the blood on leaving the blood-vessels undergoes a chemical change during the period of adhesion which alters the

individual constituents. In the blood corpuscles the principal constituents are phosphates and potassium, while the plasma contains lime and chloride of sodium. In the clot is found white blood corpuscles, acid phosphates of lime and magnesia, which must, according to the analytical calculation, be partially derived from the cell element of the blood. His contention is that the blood corpuscle containing the insoluble acid phosphate of lime is the cause of coagulation. If to a quantity of fluid serum chloride of lime and acid phosphate of lime be added a clot will immediately result, but if the phosphate of lime is held in solution by another salt the clot fails to form, even when the so-called ferment solution, or blood itself be added. From these results he is persuaded that the formation of clot is a chemical change depending on the presence of phosphate of lime.—*Corresp. Med. Press and Circular*, Jan. 13, 1892.

#### **Hammerschlag (A.) on the Specific Gravity of the Blood in Disease.**

—The author adopted a simple method of determining the specific gravity of the blood: A drop of blood is dropped into a mixture of chloroform and benzol; chloroform or benzol is then added until the drop remains suspended in any part of the fluid, and the specific gravity of the latter is determined with an aræometer. As the result of numerous observations, the author draws the following conclusions:

1. The specific gravity of the blood is pre-eminently dependent on the amount of hemoglobin in it, and is independent of the number of blood cells.

2. In chlorosis and the various forms of primary and secondary anæmia, and in tubercular diseases and malignant tumors, there is a constant relation between the quantity of hemoglobin present in the blood and the specific gravity; the same specific gravity in different cases corresponding to the same percentage of hemoglobin. The latter may therefore be estimated from the specific gravity. As the method of determining specific gravity gives more accurate results than the usual methods of determining hemoglobin, and is easily performed, it may be found of practical value in the examination of the blood of anæmic patients.

3. In nephritis the specific gravity is lower than would correspond to the amount of hemoglobin present. Probably

this is because there is in these cases a true hydræmia, the blood serum containing less albumen than normal. It is interesting to note that in patients with contracted kidneys there is often, notwithstanding striking pallor of the skin, a normal specific gravity. The pallor is then probably due to contraction of the smallest blood-vessels.

4. With heart-lesions, whether compensation is disturbed or not, and with disturbances of circulation due to other causes, the specific gravity, even if there is œdema, is usually normal.

5. In fever the specific gravity is lowered; after fall of temperature it rises again.

The following table of specific gravities of blood and corresponding percentages of hemoglobin are compiled from the figures of von Schmaltz and the author:

1033—1035.....	25—30 %
1035—1038.....	30—35 %
1038—1040.....	35—40 %
1040—1045.....	40—45 %
1045—1048.....	45—55 %
1048—1050.....	55—65 %
1050—1053.....	65—70 %
1053—1055.....	70—75 %
1055—1057.....	75—85 %
1057—1060.....	85—95 %

—*Centralblatt für klinische Medizin*, Oct. 31, 1891.

**Farrar (J. D.) on Intestinal Antisepsis in Typhoid Fever by Means of Bismuth Subiodide and Salol.**—I write in commendation of the plan in practice at this hospital, of giving bismuth subiodide and salol in typhoid fever for purposes of intestinal antisepsis. The test of the accomplishment of intestinal antisepsis is the deodorization of the stools. This method of treatment certainly seems to reduce tympanites, control diarrhœa, and prevent hemorrhage—the latter complication being rare when the antisepsis is early secured and persistently maintained. This treatment will modify the severity if it does not limit the duration of the disease. The rule is to begin the administration of the drugs mentioned, alternately, whenever diarrhœa exists, and to continue the same throughout the disease, aiming to keep the stools thoroughly disinfected. Twenty-four cases have been thus treated, and the foregoing recommendation is the outcome of a study of the results thereby obtained.—*Phil. Med. News*, Jan. 16, 1892.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## LEADING ARTICLE.

### OPERATIVE MEASURES FOR THE PRESERVATION OF THE UTERINE APPENDAGES.

The subject is one of especial importance in connection with the great advance in abdominal surgery of the past few years.

In an article published in the *Medical Record*, September 18, 1886, Dr. Wm. M. Polk suggested the possibilities of surgery in this direction, and in 1887 he presented before the New York Obstetrical Society a report of four cases of chronic salpingitis with adhesions, which were treated simply by laparotomy and freeing of adhesions about the uterus and appendages (*American Journal Obstetrics*, vol. xx., p. 630). Four more cases were reported in September of that year. In both of these papers conservative measures of similar character were advocated. A paper by the same author, read before the American Medical Association (May 6, 1891), contains a report of forty-two additional cases of abdominal section for lesions commonly presented in connection with, or resulting from, peri-uterine inflammations (*Am. Jour. Obstet.*, vol. xxiv., No. 9). The details of these operations are given in full in Dr. Polk's paper, and an abstract of some of the principles evolved will, it is believed, prove of interest and value to every operator in this branch of surgical work.

The lesions under consideration embrace "hydrosalpinx," "hematosalpinx," "chronic endosalpingitis," and "parenchymatous salpingitis" (chronic salpingitis and pyosalpinx), "purulent and blood cysts of the ovary," and "pelvic abscess."

Hydrosalpinx, which usually has associated with it disseminated cystic degeneration of the ovary, is seldom cured by conservative measures. In hematosalpinx,

however, the ovary, is less likely to be irreparably diseased, and where the blood contained in the tube is fluid and small in quantity, restoration of the normal function of the parts is possible. Where the tube is filled with a large blood clot made up of concentric layers the prognosis is less favorable.

Chronic salpingitis exists in various forms described as endosalpingitis, parenchymatous salpingitis and pyosalpinx. In all there is an accumulation of mucoid or purulent fluid. The so-called parenchymatous salpingitis is that in which more or less extensive thickening of the walls of the tubes exists. Peritoneal adhesions are found in nearly every case, although in some, especially the parenchymatous forms, the fimbriated end of the tubes are open, and it is probable that the entire tube is patent.

The ovaries may present any of the following changes: Enlargement from prolonged congestion, disseminated cystic degeneration, one or two cysts involving one third or more of the ovary, and lastly cysts containing pus or blood.

The exact diagnosis of these conditions can only be made with certainty by exploratory laparotomy. The conservative measures for their relief are concisely presented by Dr. Polk as follows:

1. The condition of the ovary should be the chief factor in determining the question of procedure.

2. If need be, this may be determined by exploratory incision of the ovary.

3. If the ovary contains pus, it and the associated tube should be removed, it be-

ing the rule that whenever an ovary is removed the tube must accompany it.

4. If the tube contains pus, the ovary being free from pus or disseminated cystic degeneration, the operator is at liberty to recommend either the removal of both organs or else the partial amputation of the tube, leaving the ovary; and that the same rule apply in cases of hydrosalpinx and hematosalpinx.

5. Cysts of the ovary do not indicate removal, provided they are not general throughout the organ and can be enucleated—hematoma of the ovary a possible exception.

6. Ovaries enlarged from congestion, as in misplacements, need not be removed, but may be treated by suspension.

7. Tubes with open infundibula, even though adherent and affected with parenchymatous inflammation and endosalpingitis, do not demand removal, excepting when one opens into a pus cavity.

8. A tube whose outer end is closed may be opened, cleansed, and its inner and outer coats coaptated, and then be returned to the abdominal cavity, provided it does not contain pus and possibly old blood.

9. Adhesions do not demand the removal of the tubes and ovaries, unless they be so dense that in breaking them the appendages are seriously injured. This presupposes that the appendages in themselves are not sufficiently diseased to demand removal.

Where the tube is freed, opened, and cleansed, it is usually wise to slit open the fimbriated extremity a distance of one half to three quarters of an inch, and stitch the mucous lining to the serous covering to prevent subsequent contraction and closure. Hot water or a weak antiseptic solution from a small glass syringe or medicine dropper should be used in washing out the tube.

Where the infundibulum is amputated, the ovary remaining, a suture should be passed in the tissue between the ovary and cut end of the tube to approximate the two and check hemorrhage.

Cysts of the ovary should be enucleated if large, and, as in all cases where the ovary is opened, the wound in its surface should be closed with fine cat-gut sutures.

Enlargement of the ovaries in cases of congestion of the pelvic viscera from misplacement, may be relieved by ventral fixation of either the uterus, round liga-

ments, or appendages as circumstances may indicate in each individual case.

Referring to the results in the fifty cases reported by Dr. Polk we find that forty-eight made good recoveries from the operation and that two died. As regards therapeutic results, thirty-eight were favorable, seven were bad, and in five the condition could not be ascertained.

This is certainly an excellent showing, especially taking into consideration the fact that many of the details were new. It opens up a broad field of work and a number of operators have already adopted the same course of procedure in their treatment of these conditions.

Dr. Martin, of Berlin, read a paper on "Tubal and Ovarian Resection" before the German Gynecological Association in May, 1891, reporting forty-five cases in which he had operated with the intent of preserving as far as possible the uterine appendages. His tables show good immediate results and in the majority of instances immunity from recurrence of ovarian or tubal disease. The appendages of one side were removed and resection done upon the remaining ovary or tube in all but two of the cases. The necessity of a second operation for return of the disease in the resected appendage arose in only three. Two deaths occurred from septic peritonitis.

The cases were divided into two classes, viz.: the first embracing twenty ovarian resections, the second twenty-three tubal resections. In the first class all of the patients were able to work after the operation; menstruation was normal in fourteen, and irregular or painful in five. Subsequent pregnancies took place in five cases. In the second class menstruation was normal in eight, irregular or painful in thirteen, and the menopause occurred in one. The remaining case was too recent for a report in this particular. One patient only became pregnant. The cases were under observation from six years to three months. In reports by Zweifel and Skutsch similar cases were recorded.

Dr. Thomas in the *Medical Record* of December 19, 1891, reported a single case in which he had preserved the tube and ovary of one side, following essentially the same details as those practised by Polk and Martin.

Dr. Outerbridge in a case of catarrhal salpingitis with retroversion and fixation of

the uterus performed laparotomy, slit open the tubes and washed them out, replaced the uterus, and attached it to the abdominal wall. The patient made an uninterrupted recovery, and, although she had previously been sterile, she became pregnant and has since given birth to a living child.

Dr. A. Palmer Dudley has for some time past advocated probing occluded and purulent tubes to facilitate the evacuation of their contents through the uterus. Many other operators are working in this same channel, but as yet surprisingly few have reported any number of cases or put themselves on record as advocates of the conservative measures in question.

A strong reaction has taken place within

the past year against the indiscriminate performance of oöphorectomy, and justly so, but the majority of writers upon the subject content themselves with vague ranting upon the evils of wholesale spaying of women without suggesting any remedy. Dr. Polk has struck the keynote in his admirable paper, and it is to be hoped that the suggestions offered by him will be brought forward and generally accepted by the profession. The subject is a growing one which should be carefully studied by all in order that the operations involved may be perfected and the results attained correspondingly improved.

W. EVELYN PORTER, M.D.

## SELECTIONS FROM RECENT FOREIGN MEDICAL LITERATURE.

BY ALEXANDER H. TRAVIS, M.D.

**Pfeiffer (R.). Preliminary Communication on the Exciting Causes of Influenza.**—In a preliminary report Dr. Pfeiffer gives the results of his examination of thirty-one cases of influenza, in six of which an autopsy was made. A definite form of bacillus was found in the purulent bronchial secretions of each case. In uncomplicated cases of influenza these bacilli were present in absolutely pure culture, and usually in immense numbers. They were often situated in the protoplasm of the pus cells. When the influenza attacked persons in whom the bronchi were previously diseased, other micro-organisms were found in the secretions. The bacilli may penetrate from the bronchi into the peribronchial tissues, and may even reach the pleura. Pure cultures of them were found in the purulent pleuritic effusions in two cases, which were examined *post mortem*. These bacilli were found only in cases of influenza. Numerous control examinations showed their absence in ordinary bronchitis, pneumonia, and phthisis. With the cessation of the purulent bronchial secretion the bacilli began to disappear. They appear as small rods about as thick as the bacilli of mouse-septicæmia, but only half as long. Three or four are often found arranged in rows like chains. The best preparations are made by staining with dilute Ziel's solution, and with hot Loeffler's methylene blue. As a rule, the

ends of the bacilli are stained more deeply, so that a close resemblance to diplococci or streptococci is produced. They cannot be stained by Gram's method. The bacilli can be obtained in pure cultures. Numerous attempts at inoculation were made, but positive results were obtained only in apes and rabbits.

As it is very probable that infection is carried by the sputa containing the germs of the disease, the disinfection of the sputa of patients suffering from influenza is important as a measure of prophylaxis.—*Deutsche med. Wochenschrift*, Jan. 14, 1892.

**Kitasato (S.) on the Influenza Bacillus, and the Method of Cultivating it.**—K. believes that the failure to find the specific cause of influenza previously has been due to the great difficulty experienced in obtaining pure cultures of the bacillus from the sputum. On the surface of glycerine-agar the colonies appear as points like droplets of water, so exceedingly small that it is difficult to distinguish macroscopically a tube inoculated with them from a sterile one. They may, therefore, have been overlooked by previous investigators. If a culture be made from such a colony on a new nutrient agar medium, small colonies arise on the surface, which, however, remain separate, and "do not, as all other species of bacteria known to me do, join together and form a continuous row. This appearance is so charac-

teristic that by it the influenza bacillus may be certainly distinguished from all others." Cultivations of the bacillus have been made through ten generations. Long-continued and careful examinations of tubercular, bronchitic, pneumonic, and other sputa has failed to show in them the presence of this bacillus.—*Deutsche med. Wochenschrift*, Jan. 14, 1892.

**Canon (P.) on a Micro-Organism in the Blood of Influenza Patients.**—The blood of twenty influenza patients was examined, and in almost all the cases the above-described bacillus was found. A drop of blood removed from the finger was dried on a cover-glass, and, after remaining five minutes in absolute alcohol, was stained in a solution of methylene blue and eosin. Sometimes the bacilli appeared like diplococci—sometimes, especially when more deeply stained, as short rods. The blood was obtained during a fall of temperature, or shortly afterward. Several times, when the diagnosis of influenza was not clinically certain, it was confirmed by the examination of the blood.—*Deutsche med. Wochenschrift*, Jan. 14, 1892.

**Lemoine (G.) on Coupled Rhythm of the Heart Action.**—A woman sixty-one years of age, of previous good health, complained of pains in the nape of the neck, of pains in the epigastrium radiating to the lumbar region, and of dyspnoea. The dyspnoea was purely subjective. The heart was much enlarged, its impulse diffused and feeble. At one time the rhythm of the heart sounds was regular, but very slow, thirty to forty to the minute; at another the systoles were arranged in groups of two, the sounds of the first contraction being more strongly marked than those of the second, from which they were separated by a short silence, a long interval separating each pair of contractions from the succeeding couple. A soft murmur of mitral insufficiency was audible with the first contraction, but not with the second. This peculiarity of rhythm would continue for a few minutes or several hours. It would appear and disappear abruptly, and be replaced by a regular slow rhythm. Examined by the finger, the pulse showed no variations in rhythm, continuing at thirty-six to forty when the heart was beating seventy-two or eighty, and corresponding to the first contraction of each couple. Sphygmographic tracings, however, revealed a second pulsation closely following

the first, less powerful than it, and separated by a long interval from the succeeding contraction. No causes for the change in rhythm could be discovered. Lemoine concludes from the association of pain in the neck and subjective dyspnoea with the cardiac phenomena that the latter are due to functional disturbance of the pneumogastric nerve, this disturbance depending on some unknown lesion situated near the origin of the nerve. The *rhythme couplé* is the result of attempted return to normal frequency of cardiac contraction during momentary exhaustion of the overacting pneumogastriacs. — *Bulletin Médical du Nord*, Dec. 25, 1891.

**Brossard on Aneurysmal Dilatation of the Left Ventricle and Perforation of the Stomach Consecutive to a Cardiac Lesion.**—The patient, a man of about fifty years of age, weakened by alcoholic and other excesses, suffered for some time from symptoms referable to a mitral lesion, with recurrent attacks of impaired compensation characterized mainly by pulmonary congestion. Thrombosis of the right saphenous vein occurred during one attack. Until the final attack of cardiac weakness, with extreme congestion of the lungs, accompanied by severe prostration, the appetite and digestion remained good. Then there was loss of appetite; but at no time were there any gastric symptoms or abdominal pain.

At the autopsy the heart was found to be large, the enlargement chiefly affecting the left ventricle, the walls of which were extremely thin. In one spot where the thickness was only two or three millimetres a large fibrinous clot was adherent to the endocardium. It had evidently existed long before death. The mitral valves were sclerosed, stenosed, and insufficient. There was atheroma of the aortic valves and of the aorta, involving the orifice of one of the coronary arteries. In the lungs there were several infarctions. The abdominal cavity presented signs of acute general peritonitis. There was a large oval perforation of the anterior wall of the stomach, near the superior border, and near it there was a small ulcer involving the thickness of the mucous membrane. The most probable explanation of this lesion is that an embolus detached from the large clot, which filled the aneurysmal dilatation of the left ventricle, obstructed a branch of the gastric artery, and thus produced local disor-



ganization of the stomach wall. A remarkable feature of the case is that there was nothing during the patient's illness to direct the attention to the abdominal lesions.—*Poitou Méd. Revue Mensuelle*, Dec. 1, 1891.

**Surmont and Patoir on Sudden Death of a Case of Cancer of the Stomach.**—The patient, aged forty-three, complained of vomiting occurring three or four hours after eating, and epigastric pains for a period of two months. The ejecta, composed of undigested food and glairy mucus, never contained blood. There was rapid emaciation and loss of strength. He was emaciated and cachectic. There was slight distension of the abdomen and an infiltrated gland in the left subclavian depression; otherwise examination was negative. He improved a little, especially with regard to the vomiting; but a month after admission, after vomiting a little black material, he suddenly died. A carcinoma surrounding the pylorus with secondary deposits in the mesentery was found at the autopsy. The stomach, not dilated, contained digested blood; the same fluid was found in the œsophagus, pharynx, and nose, and down the respiratory tract to the finest divisions of the bronchi. Death was in this case due to asphyxia, caused by the inspiration of fluid during the act of vomiting rather than to the loss of blood. Hæmatemesis has not been regarded as a very serious or fatal complication of cancer of the stomach.—*Bulletin Médical du Nord*, Dec. 11, 1891.

**Delaunay (H.) on Heredity and Contagion in the Development of Tuberculosis.**—The influence of heredity in the etiology of tuberculosis has been much exaggerated, but it cannot be denied. There is an inheritance of a predisposition to contract the disease and also direct transmission of the disease-germs from parent to offspring. The transmission of the bacillus from mother to foetus has been indisputably established, and Delaunay believes that this latter form of heredity is not exceptional. While it is questionable if the bacillus can be transmitted through the ovium or spermatozoon, there are certain recorded cases, including a remarkable one recently reported by Landouzy, in which the influence of contagion can be excluded, and the transmission of the disease germs from the father to the child appears to be undeniable.

Bacillary toxines present in the spermatozoa (since the tubercle bacillus has been found in the healthy testicles of subjects with pulmonary tuberculosis) is another factor in hereditary transmission. Thus may probably be explained the great foetal mortality observed in the line of descent of the tuberculous.

Tuberculosis by inoculation is very rare; it is, however, frequently transmitted by the inhalation of air contaminated with the dust of dried sputa. Tuberculosis from ingesta is more common than is generally supposed. While it is not yet decided whether the flesh of tuberculous animals is injurious, no physician would advise his patients to eat infected meat. The milk of such animals is certainly noxious. Drinking-water may carry the bacilli of tuberculosis, but no great danger is to be feared from that source.—*Poitou Méd. Rev. Mens.*, Jan. 1, 1892.

**Ziegler on the Prophylaxis of Scarlatinal Nephritis.**—Led by the favorable effect of a milk diet on the course of nephritis, Ziegler has employed during the past six years an exclusive milk diet in every case of scarlatina, however slight the symptoms might be, thereby hoping to prevent the appearance of nephritis. The milk, previously boiled, was given in such quantities as the patients required. Bits of white bread were sometimes allowed. This diet was continued to the end of the third week, when a change was gradually made to other food. Neither in private practice nor among a hundred cases treated in the hospital with this diet was there observed a case of nephritis. The success of the treatment can be referred to nothing in the management of the cases except the milk diet. One of the epidemics was very severe with high death-rate and severe complications in almost every case.—*Berliner klinischer Wochenschrift*, Jan. 11, 1892.

**Hölscher and Seifert on the Action of Guaiacol.**—The favorable results obtained by the use of guaiacol (creasote) in the treatment of phthisis cannot be referred solely or even chiefly to a local action on the stomach, for guaiacol carbonate, although it is tasteless, odorless, un-irritating, and passes through the stomach almost unaltered, exercises the same tonic influence in higher degree. It is not, however, a constitutional antiseptic or specific in the sense of preventing the growth of

the tubercle bacillus in the organism, for, as shown in experiments here reported, guaiacol exists in the blood, not in a free condition, but in an imperfectly understood combination which is without influence on the growth of the tubercle-bacillus. Since, of the various elements of the blood, the albuminous matters enter most readily into combination, and since guaiacol is excreted in the form of an æther-sulphate, we are justified in supposing that during absorption guaiacol combines with the albuminoids in the blood. But the blood of consumptives contains, besides the normal constituents, albuminoids in very unstable combination produced by the disease process. With these poisonous compounds the guaiacol preferably unites, forming more stable compounds, which are changed

by a process of oxidation into guaiacol sulphate and other substances which undergo further alteration. In this manner the blood is continuously freed from the poisonous products of the bacilli as long as the guaiacol is supplied in sufficient quantity. With their destruction disappear the symptoms produced by them—fever, sweating, loss of appetite, and nutrition, and depression. The greater the amount of creasote absorbed, therefore, the more successful is the result of the treatment. The same theory would explain the benefits received by the use of all the medicaments such as phenol and its derivatives, and many of the amines, which are excreted wholly or in part as æther-sulphates.—*Berliner klin. Wochenschrift*, Jan. 18, 1892.

## REPORT ON NERVOUS AND MENTAL DISEASES.

BY WM. M. LESZYNSKY, M.D.

**Oliver (Charles A.) on the Ocular Symptoms of Idiocy.**—This paper resolves itself into a study of the eye symptoms of that peculiar form of congenital idiocy which presents a marked brachycephalic deformity as one of its most prominent features—the so-called Mongolian type of idiocy.

These observations have been combined into fifty-seven short captions, from which the following five conclusions have been formulated :

1. In the so-called Mongolian type of idiocy, the malpositions, irregularity of contour, and inequality in comparative size of the bony orbits, with the obliquity of the attached ligamental and tarsal tissues, giving the palpebral fissures their peculiarity of direction, the lids their shortness, and the eyes their apparent relative faulty situations, are merely the rough ocular expressions of the results of the osseous and ligamental malformations so characteristic of the disorder : in fact, it is these conditions which have, more than any other, contributed to the naming of the type.

2. In the so-called Mongolian type of idiocy, the ocular bulb, in nearly every instance, presents peculiarities of structural change characterized by the appearances of the results of low and chronic forms of neuro-retinitis and choroiditis, indicative

of local inflammation of these parts, both before and after birth of the individual.

3. In the so-called Mongolian type of idiocy, the substance of the intraocular ending of the optic nerve and the circumjacent retinal and choroidal membranes, seem, in those instances where there are no marked evidences of coarse intraocular change, to share in the soft, jelly-like œdema so universally recognized in the external portions of the organ.

4. In the so-called Mongolian type of idiocy, the mucous lining of the ocular appendages and of the anterior part of the globe, in every instance, exhibits the many gross pathological peculiarities seen in the chronic and constantly provoked inflammation of other similar surfaces found throughout the same subject, and which in the great majority of cases leads to lethal result.

5. In the so-called Mongolian type of idiocy, the peculiar vascular changes are not only discoverable—even ophthalmoscopically—in the vessels of the retina, where the visible portions of the walls appear thin and so peculiarly tinted, and the sequelæ of fine capillary and even larger hemorrhagic extravasation into the retinal substance, with probable evidences of graver complications, are most common, but, as almost universally seen in identical imperfections and disease of intracranial

vessel structure, serve, with the general clinical features of imperfect circulation, to show, both objectively and subjectively, the prominent characteristic lesion, and probably etiological condition of the disorder,—*imperfect development with consequent disease of the entire vascular system.*—*Univers. Med. Magazine*, Dec., 1891.

**Hubbell (Alvin A.) on Optic Neuritis as a Form of Peripheral Neuritis.**—The author shows that diseases which cause peripheral neuritis also cause optic neuritis. It is well proved and generally admitted that certain substances and poisons produce an inflammation of certain peripheral nerves, prominent among which are alcohol, lead, arsenic, and bisulphide of carbon.

These substances, too, produce some form of optic neuritis. The evidence adduced is sufficient to place beyond doubt the claim that certain etiological influences and pathological results are common to both, the symptoms varying only in correspondence to difference of function of the nerve or nerves affected.

In conclusion he says:

"We can not, perhaps, understand why alcohol, bisulphide of carbon, tobacco, or diabetes, should induce axial or chronic retro-bulbar neuritis, while lead, arsenic, diphtheria, tabes, *la grippe*, or measles should develop a neuritis more generally interstitial, often acute, and showing ophthalmoscopic signs. Neither can we offer satisfactory explanation why lead pre-eminently affects the nerves supplying the extensor muscles of the extremities and the muscles of the intestine, or why tobacco has a special affinity for the nerves going to the heart, or why diphtheria conspicuously leaves its impress upon the cranial motor nerves and some of the spinal. Yet such facts remain, and the lesson which they teach us to-day is that inflammation may attack all classes of peripheral nerves alike, those of special sense as well as those of general sensation and motion, that the cause is widespread and common, and that the principles of treatment are identical."—*New York Medical Journal*, Jan., 23, 1892.

**Erb (W.) on Etiology of Tabes.**—In the *Berlin. klin. Wochenschrift*, July, 1891, Prof. Erb reports his conclusions as to the relationship of tabes with syphilis.

Three hundred patients with tabes were thoroughly and carefully examined. In 33,

or 11 per cent., there was no apparent syphilitic infection; in 267, or 89 per cent., there had been previous infection, and of the latter, 190, or 63.3 per cent., had well marked secondary symptoms, 77, or 25.7 per cent., a chancre only. These statistics are in complete accord with Erb's earlier ones, and adding them all together there are 500 cases, of which 89.2 per cent. were syphilitic, and 10.8 per cent. non-syphilitic. He concludes that syphilis plays a very prominent part in the causation of tabes, and that almost only those persons run a risk of becoming tabetic, who have formerly incurred syphilis, and that it is by far the most frequent and potent cause, and by the side of it other morbid influences play a very subordinate rôle.

**Allyn (Herman B.) on Paralysis Following Measles.**—This article is based upon the study of 40 cases collected from literature, and one case from personal observation, occurring in a boy thirteen months old. The child had measles of moderate severity. As the eruption faded catarrhal pneumonia developed. When convalescent from the latter, it was discovered that he was paralyzed on the left side. There was right ptosis. The pupils were contracted. There was left facial paralysis and left hemianæsthesia. The temperature was slightly elevated, and the pulse was irregular in rhythm. The breathing was Cheyne-Stokes in character.

About twenty months later considerable improvement was shown, most marked in the facial palsy. There was increased power in both arm and leg, and absence of contractures, but the mental condition was not encouraging. Speech and articulation were much affected, the child being very slow in acquiring words. [The symptoms in this case point to a lesion (hemorrhage) affecting the right crus cerebri.—W. M. L.]

The paralysis usually appears during convalescence, and most frequently from the latter part of the first week to the close of the third week after the onset of the attack of measles. Of twenty-one cases that are reported in sufficient detail to give the information, eleven developed the symptoms of palsy between the fifth and the sixteenth day, while five more probably belong to this period from the fact that the palsy is said to have occurred "during convalescence" (three times), "on the twelfth day after the disappearance of the eruption" (once), and "at about the

time of the disappearance of the eruption" (once). In the remaining cases, three developed convulsions on the second day of the eruption, one a month after the onset of the measles, and one in from five to six weeks.

The duration of the cerebral palsy depends upon the severity of the attack. In six cases it was between sixteen days and eight weeks. Disturbance of speech persists longer than the other evidences of the nervous lesion. In one case there was still such disturbance at the end of nine months, and in another case, aphasia lasted for two years. In Sympton's case, a girl three and a half years old, developed aphasia and right hemiplegia in connection with an attack of measles, and when thirteen years old speech was still imperfect, and there was atrophy of the right extremity. It is evident that in many cases the lesions are permanent, and Bourneville's case leaves no doubt that the future of the child is clouded by the possibility of epilepsy.

Palsy following measles is not a mere coincidence. It is less frequent than palsy following diphtheria and scarlet fever, but it is universally admitted that there is a connection of cause and effect between the two.

The blood transmits the poison of measles to all parts of the system. The eruption is seen upon the fauces before it appears upon the body, and the catarrhal pulmonary symptoms are in all probability due to the presence of the eruption upon the mucous membrane of the respiratory tract. It may be that in carrying the poison the blood-vessels themselves become altered in their structure, so as to permit of extravasations of serum or blood. If the amount be very small and reabsorption be very rapid, we can understand how the palsy may be transient; or it may be that an inflammation of the arteries is set up as a result of which the blood is withdrawn from certain areas. Osler suggests that a widespread arteritis might initiate a sclerosis, and, if suddenly developed, a porencephalus, and sclerosis and porencephalus are lesions found at autopsies in cases of infantile palsy. Gowers thinks the probable cause of the palsy is thrombosis of the cerebral veins and of the sinuses. While this occurs in infancy, I do not know of a case in which it has been demonstrated by autopsy in infantile palsy.

The fact that most of the cases of palsy following measles occur in about the second week of convalescence seems to indicate that a change has been taking place in the arteries, dating from the active stage of the disease, and that when this arterial change reaches a certain point, we have an apoplexy, a leakage of serum, or an occlusion of a number of arteries from general arteritis.

While the palsy following measles cannot be ascribed to exhaustion, there is reason to think that special susceptibility to nervous affections is a predisposing cause.—*Medical News*, Phila., Nov. 28, 1891.

**Ilberg (George) on the Subcutaneous Use of Salt Solution in Cases of Insanity.**—This method was adopted in cases of insanity where food was persistently refused and the patient was becoming exhausted. 500 to 700 ccm. of 0.75 % salt solution at a temperature of 39° to 37° C. (102½° to 98½° F.) was slowly injected into the subcutaneous connective tissue, its absorption being aided by gentle massage. This plan was advisable in those cases where satisfactory artificial feeding by means of the stomach or rectal tube is impossible. He had applied it successfully in two cases. In others where artificial feeding could be accomplished, the solution materially improved the depressed circulation. Where food was not deliberately refused the patients ate spontaneously soon after the injection. In order to discover why this occurred he subjected himself to this treatment after a week's low diet. One hour after the administration of the solution there was profuse salivation accompanied by a pungent and burning taste. He believes that the patient accepts the food in order to relieve this unpleasant sensation.—*Neurologisches Centralblatt*, No. 23, 1891.

**Althaus (Julius) on the Neurotic Character of Influenza.**—In a paper read before the Medical Society of London, November 2, 1891, the author maintains the opinion that the virus of influenza attacks primarily, not, as is generally believed, the mucous membranes of the respiratory tract, but the nervous system of the sufferer, through the agency of the blood, and that the symptoms of the feverish attack, as well as the sequels and complications of the disease, are owing to irritant poisoning of a definite portion of the nervous centres. He thus endeavors

to show the steps by which he has arrived at this opinion :

"Shortly after the visitation of influenza had commenced I was surprised to see, both in hospital and private practice, a number of patients complaining of severe forms of neuralgia, loss of power, and a general break-up of the nervous system, which they attributed to an attack of grip which they had recently passed through. Some of these patients had been in perfect health before, so that the grip appeared to be the *fons et origo mali* altogether; while in others a neurotic pedigree or a previous syphilitic infection, or some other constitutional fault could be clearly traced, upon which the subsequent nervous affection had, as it were, been grafted. I also found that the number of nervous sequels which appeared after influenza was largely in excess of other post-febrile neuroses, of which I had seen numerous examples in the course of my practice. In comparing those nervous troubles which may be met with after such diseases as diphtheria, typhoid fever, scarlatina, smallpox, measles, erysipelas, and malaria with those seen after influenza, none of them—nor, indeed, all of them put together—approached in number the nervous sequels of grip. This I attributed to the circumstance that more than half the population of the country had lately been down with influenza, while the number of patients suffering at any one period from other fevers is always very much less. There was, however, also a much greater variety in the nature of post-grippal neurosis perceptible than in others, which run in comparatively narrow grooves. Indeed, it soon became evident that as a powerful etiological factor of all kinds and forms of nerve disease influenza stands *facile princeps* among all infectious fevers. The only distemper which approaches grip in this particular quality is syphilis, which may also give rise to the symptoms of almost any nervous diseases. I find a still further analogy between these two infectious diseases in the circumstance that in both we may have a primary attack, secondary symptoms of a comparatively mild character soon afterwards, and tertiary affections of a more dangerous and obstinate nature, affecting the organic structure of tissues, at a more remote period. Grip also seems occasionally to revive an old syphilitic infection which has lain dormant in the system for years, and thus indirectly to give

rise to certain diseases of the spinal cord, which are known to occur habitually on a syphilitic base. In comparing the degree of virulence of the two poisons, however, I have found that when the grippo-toxine attacks the structure of organs, it often does so with far greater ferocity and in a more ruthless manner than the syphilitic virus. Thus we see sometimes incurable blindness, from optic atrophy, spastic spinal paralysis, and general paralysis of the insane becoming fully developed in a few days, weeks, or months from the outbreak of the feverish attack; while these diseases, when owing to syphilis take years to become fully developed, and are also more amenable to treatment."—*Lancet*, Nov. 14, 1891.

**Bannister (H. M.) on the Etiology of General Paresis.**—In a statistical note on 234 cases of parietic dementia, with special reference to its etiology, the following conclusions are drawn :

1. While it often does occur in those hereditarily predisposed to neurotic or mental disorder, general paralysis is more than most other forms of insanity an acquired disease, not dependent on hereditary neurotic taint.

2. That while it may be ascribed to various exciting causes, such as mental strain, worry, ill-health, or overwork, it is found, when all the facts can be ascertained, to have as an antecedent, syphilis, in a great majority of cases.

3. In a small number of cases in which there is found to be no positive syphilitic history, it is possible that no such taint has preceded the disease and that its symptoms can be produced in non-syphilitic individuals. These cases, considering the great predominance of specific antecedents, may, reversing the former usage, be properly called cases of pseudo-general paresis.

4. Intemperance, while a frequent antecedent of paresis, is not by any means a universal or essential one.—*Four. Ment. and Nerv. Dis.*, Dec., 1891.

**Gray (L. C.) on the Diagnosis of One Form of Intra-Cranial Syphilis.**—The author gives the histories of twenty-seven cases in support of his views.

The characteristic symptoms were a cephalalgia that is quasi-periodical, recurring generally at night, occasionally in the afternoon or in the morning, with marked insomnia; this cephalalgia and insomnia ceasing suddenly upon the supervention of any paralytic symptoms. He also calls at-

tention to the fact that a hemiplegia occurring in an individual under middle age should render us very suspicious of a syphilitic causation. This peculiar headache belongs to the early stage of intracranial syphilis, although it might occur in the primary, secondary, or tertiary state of the general syphilitic infection.—*Am. Journal Med. Sciences*, Jan., 1892.

**Bechterew (W.) on the Condition of the Cerebral Circulation during an Epileptic Attack.**—The writer made a series of experiments upon dogs and cats with a view to determining this question. The epileptic convulsions were artificially produced either by irritation of the cortex by the faradic current or by injection into the circulation of essence d'absinthe, cinchonin, or cinchonidin. The condition of the vessels was observed through an opening in the skull, into which a watch-glass had been inserted.

The results of these investigations showed that during the epileptic paroxysm the brain receives an increased blood supply, and that the capillary vessels become dilated.—*Neurologisches Centralblatt*, No. 22, 1891.

**Mills (Chas. K.) on the Localization of the Auditory Centre.**—The case reported is one in which word-deafness followed an apoplectic seizure, and more complete deafness and partial left-sided paralysis followed a second apoplexy. The autopsy showed lesions of the first and second temporal convolutions of both hemispheres and a lesion of the first and second temporal convolutions of the left hemisphere, which probably accurately localizes the centre for word-hearing.

From a study of this case the writer draws the following conclusions:

1. The centre for word-hearing is situated in the hinder thirds of the first and second temporal convolutions. Its exact position is in a line with, or just in front of, the posterior extremity of the horizontal branch of the fissure of Sylvius. Possibly it is restricted to the second temporal.

2. The third, fourth, and fifth temporal convolutions take no part in cerebral audition.

3. A lesion confined to the posterior thirds of the first and second temporal convolutions of the left hemisphere will produce complete, or almost complete, word-deafness, the corresponding regions of the other hemisphere remaining intact.

4. An isolated lesion of the centre for

word-hearing, producing absolute, or nearly absolute, word-deafness, does not necessarily cause inability to recall words by other means, as, for instance, through their visual signs. In such cases probably the meaning of the word is understood, although the name cannot be properly verified in consciousness.—*Brain*, Part lvi., 1891.

**Schuber on the Use of Somnal in Mental Affections.**—The writer thus summarizes the result of his experience in Meynert's Clinic: That somnal in doses of two grammes is an excellent hypnotic in cases of insanity without excitement. It can be used daily for several weeks without producing any unpleasant symptoms.

It is of no value in conditions of excitement. When severe headache is present somnal does not relieve the sleeplessness. It does not seem to possess any influence over the circulation or respiratory function.

It is best administered in milk or some mucilaginous vehicle.—*Wiener klin. Wochenschr.*, 1891, No. 22.

**Curryer (W. F.) on Common Salt for Facial Neuralgia and Allied Neuroses.**—Take chloride of sodium finely powdered and perfectly dry, use as a snuff in the nostril of the affected side. The best results are obtained when the salt is administered through an insufflator. An insufflator holding four or five grains is sufficient. As the powder is blown in the nostril ask the patient to inhale through the nose, that the remedy may be thoroughly distributed over the membranes. The application will produce but little pain or discomfort, and often a single treatment will immediately inhibit a neuralgia, especially when it is recent and located in one branch of the fifth nerve. In other cases, where the disease has been protracted and extensively distributed, the insufflation may be repeated every one half to one minute for five to ten minutes. This novel treatment has given satisfaction many times, and may also be used for odontalgia, cephalgia, bronchial asthma, etc.—*Medical Free Press*, Jan. 16, 1892.

**Leszynsky (W. M.) on Alcoholic Multiple Neuritis in a Child Seven Years of Age.**—The child was in good health until his fifth year, when he was ill with chills and fever, but soon recovered. Five months before he complained of pain and numbness in the forearms and legs, which continued for three or four months.

There was frequent sweating at night, but no cough. He suffered from frontal headache, dyspnoea, and præcordial pain. Both lower extremities became paralyzed four weeks before consultation. "*As the child was rather feeble during the last two years, the mother (who is an untutored and ignorant woman) has been giving him two bottles of beer daily, and some whiskey occasionally during the day, in order to 'put some life in' him, as she expresses it.*"

Examination revealed bilateral wrist-drop and almost complete anæsthesia in the

course of the radial distribution. The extensors and interossei were partially atrophied, and electrical reaction of degeneration was present. The tibialis anticus, the extensor longus digitorum, and the other flexors of the foot and extensors of the toes were paralyzed and atrophied on both sides. Reaction of degeneration was present and incomplete anæsthesia over anterior surface of leg and foot.

Patient died from exhaustion a few months later.—*The Post-Graduate*, Jan., 1892.

## REPORT ON SURGERY.

BY CHARLES A. POWERS, M.D.

**Zimmerman (W.) on Brain Softening after Ligation of Common Carotid Artery.**—Supported by forty *post-mortem* examinations (four personal), Zimmerman believes that a necrosis occurs when (1) endothelial lesion progressive thrombus occurs; (2) when the simple thrombus is broken up multiple emboli arise; and (3) when through atheromatous degeneration of the vessels a venous hyperæmia and hydrops is set up.

Out of 65 cases in which the common carotid was ligated, brain softening occurred in 11.6 %.—*Beiträge zur klin. Chir.*, Bd. viii.

**Köttwitz (A.) on Treatment of Actinomycosis.**—K. recommends (*Deutsch med. Woch.*, 1891, p. 1047) the use of silver nitrate in the fistulæ of actinomycosis. He has so cured four patients, in each of whom a carious tooth was the seat of infection, and has proved freedom from recurrence one to three years after cure.—*Central. für Chir.*, 1892, No. 1.

**Barth on Sarcoma of Prostate.**—Barth has seen three cases of this rare affection, one in a child of nine months, the other two in youths. He makes two forms. One extends toward the rectum, the other in the direction of the bladder. The tumors are often pseudo-fluctuating and simulate tuberculosis.—Death usually occurs in six months.—*Rev. de Chirurgie*, 1891, p. 931.

**Escher on Bassini's Method for Radical Cure of Hernia.**—Escher reports 53 cases, of which 35 were reducible, 9 irreducible, and 9 strangulated; 34 times union by first intention, 17 with suppuration, 2 deaths (embolus, pneumonia).

The patients did not wear truss after operation, and there were but three cases in which recurrence took place, though he does not give length of time which had elapsed when report was made.—*Revue de Chirurgie*, 1891, p. 926.

**Karewski on the Radical Cure of Hernia Congenitalis in the First Year of Life.**—Karewski believes that it suffices, in young children, to simply ligate the sac as high as possible. *Etage* suture, etc., are not easily borne by the tender tissues. To this latter procedure he attributes failure.—Ref. in *Revue de Chirurgie*, 1891, No. 10.

**Berger on the Treatment of Gunshot Wounds of the Abdomen.**—Since the publication of Buhl's original paper nearly 200 cases of interference have been reported (*vide*, Coley, *Am. Jour. Med. Sci.*, 1891), the mortality constantly decreasing as technique has improved.

Berger has been unfortunate, either in his cases or his management, inasmuch as out of five cases subjected to laparotomy but one recovered. He believes that the wounds of the large intestine and stomach are less dangerous than those of the small gut. He opens the abdomen at once when he sees the patient immediately after the wound is received, but if several hours have elapsed he does not interfere unless hemorrhage or commencing peritonitis be present.—*Revue de Chirurgie*, 1891, No. 11.

**Yeoman (S.) on Dislocation of Both Shoulders.**—A man of nineteen, whilst pushing a heavy truck in a coal-pit, knocked against a prop that was supporting the roof; this gave way, bringing down

with it a large part of the roof, which fell on his back; he managed to struggle a little way, but was unable to extricate himself from the rubbish, and was finally pulled out by the right arm. When seen he was suffering from slight shock, and had a sub-coracoid dislocation of both shoulders, with slight bruising of the back. Reduction was easily effected on both sides by manipulation without the use of an anæsthetic. The arms were then fixed in front of the chest by Sayre's method of strapping by adhesive plaster. They were kept up for twelve days and then taken down. Eight weeks after the accident the functions were excellent.—*Lancet*, Oct. 31, 1891.

**Frappie (M.) on Fracture of Sternum in a Young Man.**—Aman of twenty-two years received a blow on the sternum. Pain and crepitus between second and third costal cartilages. Body bent forward; abdomen retracted. False motion at seat of lesion. Successfully treated by simple confinement.—*Four. des Sciences Médicales de Lille*, Oct. 16, 1891.

**Robinson (F. B.) on Cysts of the Urachus.**—After analysis of six cases, Robinson concludes as follows:

#### CONCLUSIONS.

1. The ætiology of urachal cysts lies in arrest of development, but in post-natal life they are mainly associated with tuberculosis.

2. We have clinically two kinds of urachal cysts.

3. One kind can be extirpated from the viscera in the abdominal cavity.

4. The other kind dips into the pelvis, and the cyst wall cannot be extirpated from its bed.

5. These cysts may be simply degrees of development, or similar pathological processes of the urachus, the size of the cyst being an indication of the extent of the pathology.

6. Mr. Tait claims that the cysts which go down into the pelvis are developed from the allantois, and act as peritoneum for the pelvic viscera; in fact is peritoneum. No other peritoneum ever entered the pelvis.

7. In those cases where the urachal cyst does not dip into the pelvis, its walls are tough and resemble the urachal wall.

8. In those cases in which the cyst dips into the pelvis, its wall is friable, brittle, and gelatinous. It may be as thick as sole

leather, and looks quite different from the small abdominal urachal cyst wall.

9. A view may be held which declares that the pelvic peritoneum is simply gradually displaced from the pelvis by the dilating cysts. For those cases which have borne children it may be claimed that sufficient peritoneum has been retained in the pelvis to preserve the functions of the ovaries and tubes.

10. The urachal cyst may lie dormant for indefinite periods, though at any time be excited into activity, resulting in distension.

11. The treatment consists in extirpating the cyst when possible. If in those cases where the cyst dips into the pelvis, and it be impossible to extirpate the cyst from its bed, circular drainage should be employed. The cyst should be washed out at first daily, and later, as required.

12. The mortality in operations for urachal cysts is, so far, about 40 %.

13. Dilatation of the urachus is an analogous process to the dilatation of other functionless ducts. Dilatations in Gartner's duct in man and mammals is a good example. It is similar to parovarian cysts, which are dilatations of the meso-nephritic tubules, or the tubes of the Wolffian body. Branchial fistula is also a remnant of what evolution has taught man's post-natal life to cast off. The functionless duct known as the vermiform appendix, which, from an evolutionary point, is fast fading out of existence, is a splendid sample to tell the tales of our ancestors. Evolution, in accomplishing its process, is ever beset with dangers; for the very structures which it is attempting to stamp out of existence arise to execute destruction. Encysted hydrocele is an example of a dilated functionless duct. Dilatations of the epididymus of the male are analogues of parovarian cysts—both arising from meso-nephritic tubules of the Wolffian body.—*Annals of Surgery*, Nov., 1891.

**Tuholske (H.) on Linear Craniotomy for Microcephalus.**—Tuholske adds to the interesting cases of Zanne-longue, Keen, Wyeth, Gerster, Sachs, and Ransohoff the following: baby, of uncertain age, well nourished as regards fat, but looks soft, pale, and flabby. He eats, sleeps, etc. He is unable to sit alone, or ordinarily hold up his head; however, under excitement, he is able to brace up for a moment and use his right hand with con-



siderable certainty and force, his left hand at the same time becoming more contracted and helpless. His feet assume the proper direction, but his knees and ankles are too weak to support him. The wrists are constantly flexed, the left more so than the right. The anterior fontanelle appears as an elevation, the bones being firmly united.

**Operation under chloroform.** An incision  $\frac{3}{4}$ " to the right of the median line, 6" in length, and beginning in front in the hairy part of the scalp, was carried through the soft tissues to the bone. The wound margins were displaced to allow of the opening of the skull, at a place not corresponding with the external incision. A piece of skull  $\frac{3}{4}$ " wide and reaching to the lambdoidal suture was removed. The chisel and the mallet were the instruments used in the beginning; after some minutes' hammering, respiration and pulse stopped, patient looking lifeless; removing chloroform, patient was quickly inverted over the side of the operating table, and vigorously shaken; respiration and circulation were re-established, and the operation proceeded with. Repetition of same threatening symptoms; again relief by same method. It was then thought that the anæsthesia and concussion from chiselling combined, could not be borne, and Keen's rongeur forceps were used for completing operation, which was done without further disturbance. Periosteum was not united; the scalp wound closed under the most rigidly aseptic conditions. Patient's pulse 152 when put to bed. Reaction rather slow, pulse feeble; temperature rising by evening of first day to 104° F. Rise not thought due to inflammatory conditions, but to mechanical disturbance of heat centres. Next day temperature dropped to 99° F., and remained near normal until patient left hospital. The healing was entirely uneventful; union *per primam*; all sutures removed on sixth day; patient remained in hospital for sixteen days. It was thought that there was some change for the better in the contractures of the flexor muscles of the forearm; other changes could not be observed by doctors, but thought to exist by mother; thought child some brighter.—*Weekly Medical Review*, 1891, p. 422.

**Lediard on Conical Stump after Amputation in a Child.**—Lediard reports the case of a boy of fourteen years whose arm was amputated for crush seven

years previously; four years later the stump was conical, and was reamputated.

The bone again protruded and was again resected, over two inches being removed. Conical stump is to be expected after amputation through the upper part of the arm of a child, no matter how long the flaps.

Two years ago I reported a number of such cases, and I have seen others since.

Prognosis to this effect should be made at time of original operation. C. A. P.—*Lancet*, Jan. 9, 1892.

**Matlakowski (L.) on Extirpation of Saphenous Vein in Varices with Leg Ulcer.**—Two cases, in which he resected the vein shortly before it entered the femoral, at the same time extirpating or scraping the ulcer; good result in each.

Matlakowski recommends the measure in those cases in which widened, varicose veins make locomotion difficult or impossible.—Ref. by Trzebicky in *Centralblatt für Chir.*, 1892.

**Kochler (A.) on Suture of a Fractured Olecranon.**—Kochler reports a case of simple olecranon fracture which he nailed and sutured at end of second week. Complete restoration of function. Movable and painless scar. Kochler omits a most important point—namely, *why* he resorted to open section.—*Deutsch. militär. Zeitschrift*, 1891, p. 486; *Centralblatt für Chir.*, 1892.

**Hannon (A.) on a Case of Luxatio Erecti Humeri.**—A woman of forty-one years stood, with the arm raised, leaning against a door. She slipped and fell, and when seen by Hannon the arm was directed upwards, making an angle of 170° with the axillary line—the elbow was at height of brow—forearm directed forward and inward. Head of humerus in axilla, opposite third intercostal space. Under chloroform was reposition easily effected by traction with circumduction.—Mitt. Orig. in *Centralblatt für Chirurgie*, 1892, p. 18.

**Power (D'Arcy) on Ununited Fracture in the Long Bones of Children.**—P. analyzes 67 cases, from which it appears that ununited fractures in children group themselves into three classes: the first, in which the fracture was intra-uterine; the second, in young children (often as the result of very slight violence); and a third class, embracing the greater number of the cases, which occurred in older children and in the usual manner. Of the 63 cases, 5 were in the clavicle, 9 in the humerus, 11 in the femur, and 36

in the leg. It is very remarkable that the author has not met with any recorded case of ununited fracture in the forearm, although numerically the statistics of fractures show that the radius and ulna are more frequently broken than any other in a child's body. As regarded the sex, non-union occurred in 25 males and in 35 females. In 3 cases the sex was not mentioned. So few observers had noted the side upon which the bone was broken that the table was worthless to settle this point, but there seemed to be a general impression that non-union was much more frequent upon the left than upon the right side. At any rate, the point was worth noting for future observation. The results of the treatment of non-union were most unsatisfactory. Out of the 63 cases, bony union was obtained in 6 cases, in 7 the patient was relieved, but in 36 cases the patient remained *in statu quo ante*. The author believed that ununited fractures were becoming more frequent than they formerly were, and he endeavored to account for this fact. He also pointed out how extremely rare non-union was in France, not in children only, but in adults of both sexes.—*Lancet*, Dec. 12, 1891.

**Meeh (K.) on Fatal Fat-Embolus after Fractures.**—M. is able to gather but 13 authentic cases, to which he adds 2 observed in Bruns' clinic. While the complication is frequent, yet it is seldom fatal, and in the cases of death it will in general be found to be but one of several other complications.—*Beiträge zur klin. Chir.*, Bd. viii., *Central. für Chir.*, 1892.

**Auerbach (S.) on Osmic Acid in Goitre.**—The author relates the case of a young woman of twenty-five, suffering from goitre (the variety and dimensions not stated), in which he resorted to a "combined method" of treatment, including (a) a parenchymatous injection of a solution of osmic acid (1 grain to 2 drachms of distilled water), a syringe-ful once daily, or every other day; (b) local massage, for fifteen minutes, once daily; and (c) the internal administration of iodide of potassium. By the end of three weeks all subjective symptoms disappeared, while the tumor was found to have greatly decreased in bulk (was half the size compared with the period before the treatment). Unfortunately, the woman was subsequently lost from sight.—*I etopis Khirurgicheskaho Obshchestva v' Moskve*, No. 6,

1890, p. 505; rep. by Valerius Idelson in *Annals of Surg.*, Nov., 1891.

**Reymond (C.) on the Wood Corset in the Treatment of Scoliosis.**—Dr. Reymond commends this strongly. It is light, strong, elastic, and does not hinder respiration. As it is somewhat difficult to get accustomed to its use, Dr. Reymond permits the patient to wear it but from one to two hours at first.

[Dr. Phelps, of New York, has recently (*Medical Record*, 1891) published a very plain and full description of its manufacture, and endorses it strongly after much practical experience. From his description it would seem difficult to apply.—C. A. P.]—*Revue Méd. de la Suisse Rom.*, 1891.

**Studsgaard (C.) on Longitudinal Incision in Resections of Foot and Hand.**—The transverse incision (Bardenheuer) through the extensor tendons gives

plenty of space in deeper affections of the anterior tarsal region. Tuberculous bones and capsules may be removed with ease, but the final result is often unsatisfactory on account of adhesions of the severed tendons to the skin and cicatrix, and consequently impaired motion of the toes. If the tendons do not grow together, the toes may become permanently flexed and impair the function. To prevent this the author advocates his method in order to gain free access to the diseased focus in the anterior tarsal bones and the posterior ends of the metatarsal bones without severing the extensor tendons. He splits the foot from before backwards between second and third toes, cutting through the ligamenta tarso-metatarsea and opening the capsule between the middle and external cuneiform bones. First and second toes with their cuneiform bones may now be moved inwards, third, fourth, and fifth toes with the external cuneiform and cuboid bones outwards, and the tarsus widely opened. It is now very easy to remove the diseased bones and soft tissues, and then suture the wound along the dorsum and plantar of the foot, leaving a drain through the foot in the posterior angle. The only tendon severed is that of the peroneus longus, which crosses the incision in the planta on its way to the cuneiform bones and the bases of first and second metatarsal bones. No large arteries or nerves are severed.

The author mentions a successful case operated in this way, in which he ampu-

tated parts of the four inner metatarsal bones and removed all the cuneiform bones and the navicular bone on account of tuberculous caries. The result was everything to be desired. The author claims the priority of this operation, having performed it two months before Abalinsky, who advocates the same method in *Centralblatt f. Chirurgie*, No. 43, 1890.

The author recommends a similar section of the hand for tuberculous osteitis of the carpus, considering this method superior to Lister's and Ollier's longitudinal incisions or to Butcher's and Stanley's transverse incisions. Lister's is probably the best of these, but does not give good space and the hæmostasis is often difficult if the deep arch is severed.

The longitudinal incision is made between third and fourth metacarpal bones and the joint between the os magnum and the cuneiform bone opened. The carpus may now be widely opened. It is easy to avoid the median nerve, except the branch to the radial side of fourth finger. Both superficial and deep palmar arches are severed and must be ligated in the wound.—*Hospitals-Tidende*, Jan. 7, 1891. Rep. in *Annals of Surgery*, Nov., 1891.

**Johnson (R.) and Beadles (C. F.) on Pathological Conditions of the Mamma Associated with Carcinoma.**—[At a recent meeting of the London Pathological Society Johnson and Beadles read exceedingly important papers on the above subject. These are of such value that they are reported here at some length. They impress upon the surgeon the necessity for thorough, wide excision, and upon the general practitioners that for early, careful examination of all fresh tumors by a man familiar with their phases and management.]

Mr. Raymond Johnson read a paper on "Pathological Conditions of the Mamma, Associated with Carcinoma." His investigations had been undertaken with the object of ascertaining whether pathological evidence could be obtained indicating the propriety of the complete removal of the whole organ in case of carcinoma. The condition of the breast tissue had been carefully ascertained by naked-eye examination and the use of microscopic sections. From a practical point of view it was very convenient to divide carcinoma of the breast into two varieties, the nodular and the infiltrating. The infiltration of the

gland might arise through the lymphatic, and also probably by a widespread carcinomatous change affecting the glandular tissue. Specimens and drawings were shown exhibiting both these processes. In a case of infiltrating carcinoma in a woman aged twenty-six years, microscopic examination of parts of the breast appearing normal to the naked eye revealed masses of cancer cells apparently lying in lymphatic spaces. On the other hand, in another specimen of the infiltrating variety the microscopic appearances strongly suggested that a widespread carcinomatous change was involving the whole organ—sections showing the new growth arranging itself around the small ducts, which were themselves apparently normal. In this paper, however, attention was especially directed to the nodular form of the disease. In the case of a woman aged thirty-four years a small nodular carcinoma was situated at the axillary border of the left breast. After removal, two small nodules were found at the sternal end of the breast, each having a typical structure of glandular carcinoma, whilst microscopic examination of the central part of the gland showed marked changes in the epithelium, to be described later. Reference was then made to the nodules described by Heidenhain in the fascia over the pectoral muscle, and a drawing was shown of such a nodule invading the muscle at a distance from the tumor itself. Small cysts in the breast tissue were not uncommon, but no evidence was obtained to show that their relation was more than accidental, cysts being common at the age at which cancer is common. Possibly, however, such cysts might arise as the result of the blocking of the ducts by the growth of the tumor. With the microscope changes were often found when the naked eye gave no evidence of disease. Thus in one case the microscope showed invasion of remote parts of the breast through the lymphatic spaces as in the infiltrating variety of the disease. More common, however, were proliferative changes in the epithelium of the acini. The latter were somewhat dilated, and more or less blocked by masses of swollen, faintly staining cells, often with indistinct outlines. These changes were well seen in a small indurated area excised by Mr. Godlee from the centre of the breast of a woman aged forty years. The condition was probably of the nature of a chronic inflammation, and there

were no signs of tumor formation. Specimens were also shown exhibiting these changes in breasts the seat of carcinoma, as well as in the breast of a lady whose opposite breast had been excised by Mr. Berkeley Hill for carcinoma several years previously. It was suggested that these proliferative epithelial changes probably stood in the same relation to cancer of the breast as chronic superficial glossitis did to cancer of the tongue—viz., it represented a possible pre-cancerous condition. The conditions found in the breast in association with carcinoma were summarized as follows: (a) Gland tissue to all appearances healthy; (b) gland tissue atrophied; with large admixture of fat and fibrous tissue; (c) chronic proliferative epithelial changes; (d) infection of the gland through the lymphatics; (e) cystic changes; and (f) presence of simple tumor. The conclusion to be drawn from these observations seemed to be that, as far as possible, all the gland tissue should be removed in excising a cancer of the breast. Breast tissue was liable to be left in reflecting skin flaps from the surface of the gland, at the periphery of the breast, and on the surface of the pectoral muscle. As far as possible all overlying skin should be removed, and the surface of the pectoral muscle should be cleaned, with possibly removal of the superficial fibres. Finally, specimens were exhibited showing fragments of breast tissue left behind in the usual operation of excision, and others showing that such fragments might in some cases at least be the starting-point of recurrent growths.

Mr. Cecil F. Beadles read a paper on some "Histological Changes in the Breast Found in Association with Glandular Carcinoma." He commenced by saying that the condition of the breast tissue apart from the actual carcinomatous tumor appeared to have been little, if at all, investigated. After a careful search into the literature of the subject, he had only found allusions to the subject by Cornil and by Creighton. As a result of microscopical examination of about a hundred breasts amputated for carcinoma, he was able to state that these breasts were never in what might be considered as a normal state, but it was doubtful to what extent the conditions found were dependent on the presence of cancer. He then referred to the frequency with which small carcino-

matous nodules might be found at a distance from the larger growth, and having no connection with it. He then described the changes found in the stroma of the breast lobules, and said there could be seen in different cases all the stages usually described as being present in chronic interstitial mastitis—namely, a small round-celled infiltration, a stroma formed of connective-tissue cells, and of dense fibrous tissue, associated with atrophy of the gland acini, or with the formation of cysts. There was often also a marked proliferation of the epithelium within the acini, and when this was considerable the central cells were usually degenerated. A peculiar change found in some gland acini of the breasts affected by malignant disease was then described. This consisted in the increase, combined with great irregularity in size of the epithelial cells, some being very large and in character indistinguishable from malignant cells. These were often associated with degeneration of the others, the debris formed by cells and cell secretion being often of a yellowish-brown color. This condition he looked upon as a stage between simple oedema and glandular carcinoma, which was, in fact, commencing malignant disease. A papilliform change, sometimes found in the epithelium of the ducts, was next described. This presented itself in two forms—in the one, groups of spaces were lined by large columnar epithelial cells, and into these spaces small processes passed from the stroma. This condition he had found in breasts that contained no form of malignant growth. In the other form there was a fine branching intracystic growth of fibro-cellular tissue, covered by smaller columnar cells. The process of degeneration could be traced in adjoining spaces, both of the stroma and epithelium. In conclusion, Mr. Beadles believed the changes that he had described in the gland acini were independent of the primary growth, and were probably produced by the same cause as the latter; and he stated that in his experience the direct infection of the breast through the lymphatics was extremely rare, except in the immediate neighborhood of the growth. These changes in the epithelium might account for recurrences of the disease in some cases, so that very great care should be exercised in the removal of all traces of the mammary gland.—*Lancet*, Jan. 9, 1892.

## REPORT ON DISEASES OF WOMEN.

BY ELIZABETH ADAMS, M.D.

**Price (J.). Complications in Pelvic and Abdominal Surgery, and How to Deal with Them.**—The complications of surgery in general become more formidable as the organs dealt with, are in close relation, or of vital importance, to the economy. To separate adhesions the plane of cleavage must be found and followed by finger-tips so well educated that no advances are made into the structure of adjacent organs. To control hemorrhage in this field, the ordinary means are a failure. Hot-water flushing, gauze packing, and the drainage tube are indicated. Drain the tube by a long-nozzled syringe often enough to keep it dry; dress it so as to keep the patient dry and clean; remove it as soon as the discharge is clear. If the intestine is injured it should be stitched up with the finest silk and in such a manner as not to interfere with its function. No holes should be left in the omentum, and any stringy masses should be carefully tied off when it should be brought as nearly as possible into its physiological position. "The direct method of dealing with all pelvic inflammation is urgently advised. Prompt enucleation cannot fail to be more satisfactory than any other means."—*American Journal of Obstetrics*, Dec., 1891.

**Kelly (H. A.) on Hand Disinfection.**—My method of disinfection is as follows:

1. Scrubbing the hands with especial attention to the nails—not more than one millimetre in length—for ten minutes in water frequently changed, at about 40° C. (104° F.)

2. Immersion of the hands in a solution of permanganate of potash, made by adding an excess of the salt to boiling distilled water, until every part of the hands and lower forearms is stained a deep mahogany red or almost black color. They are then transferred at once to a saturated solution of oxalic acid until completely decolorized and of a healthy pink color. This decolorization is accompanied by a sense of warmth, due to chemical reaction, and a sharp stinging wherever there is any abrasion of the epidermis.

3. Washing off the oxalic acid in warm sterilized water.

By this simple process the hands are rendered more nearly absolutely aseptic than by any other known means.

In fifty experiments after disinfection by this method, forty-four remained without growth; the remaining six yielded respectively eighty, twenty, ten, nine, five, four colonies—an enormous quantitative difference in favor of permanganate of potash and oxalic acid, as contrasted with soap-and-water and corrosive sublimate.—*American Journal of Obstetrics*, Dec., 1891.

**Cushing (C.) on the Use of the Uterine Sound to Correct Backward Displacements of the Uterus.**—The author excludes cases where disease of the Fallopian tubes exists. Otherwise, when the ordinary procedures have failed to relieve, a stiff copper sound, or better a No. 8 Otis steel urethral sound (patient in knee-chest position), is introduced, with the cavity backward. An arc is then described with the handle of the sound and the uterus is brought into a condition of anteversion. A vaginal tampon of cotton charged with glycerine is put in position, and rest in bed for forty-eight hours prescribed.

If it be found that the uterus cannot be placed in a state of anteversion without the using of great force, or if it be found that the adhesions to the rectum are so firm that when the sound is removed the uterus immediately springs back as though drawn by a rubber band, it is probable that the plan of correcting the displacement by the sound will prove a failure.—*Buffalo Medical and Surgical Journal*, Nov., 1891.

**Emmet (J. D.) on Sterility in the Nullipara Pathologically and Ethically Considered.**—The author considers the subject under the following divisions:

1. Uterus or ovaries, or both, undeveloped or absent, and menstruation has not appeared.

2. Cases in which there is partial or complete destruction of the parenchyma of the ovaries or tubes due to repeated attacks of peritonitis. Under these conditions, happily for womankind, the writer does not herald the radical operation as the forlorn hope, but suggests, by the judicious pla-

cing of wool-pads, a gradual lifting of the enlarged, tender, and prolapsed ovaries to a plane in the pelvis at which normal circulation may assert itself. Should these cases come to the table, an honest surgeon presiding, if he find one, still more both, ovaries but partially diseased, will puncture the follicular cysts, or even remove a large portion of hopeless tissue, and have the remaining healthy portion of the organ to heal and do its work. If he find but little pus in a tube he will pass a filiform probe through the fimbriated extremity into the uterus, knowing that by thus emptying it he can often restore its function.

3. Displacements and malpositions of the uterus consequent upon a former pelvic inflammation or a present subacute inflammation of one or both broad ligaments, or of the utero-sacral folds—tubes and ovaries not involved. Antelexion just above the internal os marks this class. The following is the method of treatment in these cases :

If I can detect any inflammation or congestion in the uterine ligaments, I treat that first until I have recovered for the uterus its normal mobility. When the antelexion alone remains, I usually insert first a small, soft rubber ring that I may raise the uterus from the floor of the pelvis. Treatment with iodine and glycerine is still continued that it may assist in the contracting and emptying of the uterine veins. At the same time I restore to a healthy condition the glands of the cervical canal, which, in every case of long-standing antelexion, exude a thick, glairy and tenacious mucus—another evidence of the congested state of the uterus. This mucus forms a plug to the canal and, being acid, is itself a bar to pregnancy. In some cases, where this discharge is very profuse, I begin by the thorough use of the dull curette up to but not beyond the internal os. When the discharge is moderate in quantity, I pass Hanks' graduated dilators, which I use as sounds, quite up to the internal os. I do this slowly making pressure at the same time against the sides of the canal. After a time, the secretion becomes normal in character and quantity. I then insert, if I have not already done so, an Emmet's hard-rubber pessary, which draws the os externum backward towards the posterior fornix vaginae. I use an Emmet's pessary because its slight posterior curve does not put the utero-sacral

ligaments upon the stretch and thereby increase the anteversion.

The patient is now in a fair way to become pregnant, but as most patients are impatient to see immediate results from their treatment, I generally direct them at this time to come to me as soon after menstruation as possible. I thereupon clean out the vagina and the cervical canal very thoroughly and place pledgets of cotton soaked in an alkaline solution both in the vagina and in the cervix. The pessary is, of course, left *in situ*. After this I direct the patient to go home, to remove the cotton pads by their strings, to take a hot alkaline douche, and then to have immediate sexual intercourse with her husband, who has previously been requested to hold himself in waiting. This intercourse, preceded by alkaline douches, is repeated for several days thereafter. This is, I think, the least objectionable of the several *one-two-three-go* methods of obtaining this laudable end which have been presented to the profession.

4. Marked irregularity of menstruation, antelexion present or not, a tendency to rapid accumulation of adipose tissue. Deciding that fatty degeneration of the ovaries more or less advanced explains the sterility in these cases, then stimulation is the treatment. "Frequently applied faradic current, iodine and glycerine; hot-water douches in the supine position; hot foot-baths and hot flax-seed poultices for several nights preceding the hoped-for flow."—*The N. Y. Jour. of Gyn. and Obs.*, Nov., '91.

**Johnson (J. T.) on the Growth of Fibroid Tumors of the Uterus after the Menopause.**—The following summary is submitted :

1. That the "rule" stated in the textbooks that uterine fibromata cease to grow after the menopause, has many more exceptions than is generally supposed.
2. That *when* they continue to grow after the menopause, they pursue a more disastrous course than before.
3. They more frequently become cystic, calcareous, or have abscesses develop in them.
4. These conditions requiring operation according to well-known rules of surgery, the patients are in a less favorable condition for recovery than before the menopause.
5. If the above conclusions are admitted

to be true, it must follow that they furnish additional indications for more frequent and earlier resort to the radical operation.

6. In the hands of the best operators, in cases where a pedicle can be secured, the mortality of supravaginal hysterectomy is rapidly approaching that of ovariectomy.—*Am. Four. of Obs.*, Dec., '91.

**Adams (C. W.) on Laceration of the Perineum.**—After an interesting explanation of the conditions demanding repair and the various methods in vogue, Adams decides in favor of the following:

In an incomplete laceration or where there is sagging of the pelvic floor without loss of tissue, we dissect off the vaginal mucous membrane from the rectal septum with a pair of scissors, beginning at a transverse incision along the integumentary border, continuing the dissection as high up on the posterior vaginal wall as may be necessary to gather up every separation of muscle and fasciæ. The flap, during the dissection, is held up by an assistant, out of the way of the operator, while injury to the rectal wall is guarded against by keeping the posterior vaginal wall tense by one or two fingers of the operator introduced into the rectum. The vaginal flap is left attached in situ, and after the introduction of the sutures is left alone, thus acting as a cover or valve and preventing the entrance of fluids into the wound from above. Some operators stitch the flap with fine sutures. When the flap

is loosened and lifted up the freshened surfaces present the appearance of two triangles with their sides joined and running up to an apex above within the vagina.

In the original operation the sutures were introduced through the skin, some distance from the denuded edge; but I have found that it answers better, to introduce them after the method of Tait, in the freshened surface just within the border of the skin. This method prevents the infolding of the integument, and the resulting union is much better. If the material used for suture be passed deeply by the needle and made to grasp as much deep tissue as is possible, it can hardly fail to bring muscles and fasciæ approximately to their normal condition in the central perineal *raphe*.

In lacerations which enter the rectum (fortunately a rare occurrence), after freshening the edges of the septum and dissecting up the vaginal mucous membrane, an incision is made from the edge of the septum along the rectal mucous membrane outward and downward to the ends of the sphincter ani and upward to the base of the original posterior commissure. The space thus freshened represents a quadrilateral surface, which, when brought together by sutures, accurately represents the original perineum. Care must be taken that the ends of the sphincter ani are grasped and brought together by the sutures.—*Toledo Med. Compend*, Oct., '91.

## REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

**McKenzie (B. E.) on Open Incision on the Concave Surface in the Treatment of Inveterate Cases of Talipes Equino-Varus.**—Nine cases are reported, and the following are the conclusions:

(1) I think it much better that the tendo-Achilles should not be cut until the varus has been fully overcome. By leaving this tendon intact the foot and leg are retained in such a relation to each other that the outer portion of the os calcis and astragalus becomes a fulcrum over which the foot may be pried, giving one great manual power to correct the varus, the leg and foot being arms of a lever moving in the same plane. If the tendo-Achilles be

first cut and the axis of the foot be brought into a position of right angle to that of the leg, then the prying of the foot in an effort to correct the varus is like turning a crank about an axis represented by the leg, as the plane through which the foot is now moving is not the same as that of the axis of the leg, but at right angles to it.

(2) The hand is a much better instrument with which to make correction than any form of machine, and under the conditions named sufficient force may be applied to tear asunder or stretch all obstructions remaining when the knife has done its work by cutting the structures named in describing the operation.

(3) It is better not to employ an Es-

march bandage or other obstruction to the circulation, as there need be but little hemorrhage, and the oozing after operation will be much less troublesome, as the tonicity of the vessels is thus left unimpaired.

(4) The operation, as pointed out by Phelps, is one of less danger than that by osteotomy, or than the removal of one or more bones. The resulting foot is more shapely, not having been shortened by the removal of any of its parts. All the articulations of the foot are left intact, to increase its future mobility, whereas the other methods referred to interfere with this function to a greater or less extent.

(5) Assuming that the correction of both varus and equinus has been sufficient, relapse may be prevented by two very simple means. There should be worn in walking a shoe having the sole much thickened and shelved outward at the outer side, while the part pressed upon by the head of the first metatarsal bone is supported by a strong counter thus made powerful to resist the tendency of the anterior portion of the foot to move inward. The portion of the sole under the os calcis should be made broad and low so as to give a secure foundation, and to keep the foot well flexed within a right angle. At night, a very simple retentive shoe should be worn.

(6) In children younger than those whose cases are here reported, it will seldom be necessary to make the open incision, rectification being possible by manipulation alone, or by manipulation after subcutaneous tenotomy and fasciotomy.—*Univ. Med. Mag.*, Jan., 1892.

**Young (J. K.) on a Case of Bilateral Lumbar Abscess Associated with Pott's Disease.**—One case is reported, and after discussing the literature of the subject the author points out that the usual course for abscesses in the lumbar region is one of four ways:

First, to be directed to the iliac region along the aorta and external iliac arteries, to terminate as a gluteal abscess; second, to enter the psoas sheath and become a psoas abscess; third, to burrow through the fasciæ of the quadratus lumborum and the internal oblique muscle, to appear on the surface between the external oblique and latissimus dorsi at the outer border of the erector spinæ muscles; or, fourth, to

gravitate beneath the internal iliac muscles over the posterior brim of the pelvis, perforating the great sacro-sciatic foramen, to appear as a gluteal abscess.—*Med. News*, Jan. 16, 1892.

**Hawkes (J. M.) on Injury to the Spine; Invention and Application of Paper Jacket.**—Upon a plaster cast of the patient the jacket is constructed of strips of paper of pure jute fibre laid one upon another in various directions and held by glue until a shell of sufficient thickness has been obtained. The jacket is in two (anterior and posterior) parts and laced on the side with elastic cord.

The advantages claimed by the author are:

1. It is the thinnest, lightest, and strongest jacket, furnishing sufficient support, ever made. Though its average weight is only about twelve ounces, and its average thickness less than three thirty-seconds of an inch, yet it is able to sustain a weight of over two hundred pounds.

2. It is impervious to moisture; hence, does not absorb perspiration, and consequently does not become unbearable to the wearer.

3. A lady can wear it in place of the ordinary corset without "letting out" her dresses or making any changes in her ordinary wearing apparel.

4. The most muscular laborer engaged in the severest kind of manual labor finds it capable of sustaining any necessary strain.

5. It furnishes a more convenient, efficient, and durable support for the jury-mast, shoulder-brace, abdominal supporter, truss, leg-brace, etc., than any other kindred appliance.

6. It does not disintegrate and soil the clothing like plaster, or rust out like "alloy wire," or soften like felt.

7. It affords a solid base from which to furnish direct pressure to remedy any existing or developing deformity, yet accommodates itself to the action of the muscles of respiration.

8. It can be easily modelled to fit any exaggeration of anatomical contour, and can be ventilated by means of eyelets to any extent.

9. It is practically indestructible. The patient can never wear it out.

10. Its cost is no more than that of any other first-class appliance.—*Med. News*, Jan. 16, 1892.



**Steele (A. J.) on Recumbency and Head-Traction for Pott's Disease.**

One case is reported, treated continuously recumbent on the author's "stretcher splint." The splint is an oblong frame of flat bar iron, a little longer and a little wider than the patient, covered with canvas, upon which the patient rests. The patient is strapped to the splint, and traction and counter-traction made to uprights attached to the frame.—Reprint from *The Med. Fortnightly*, Feb. 1, 1891.

**Nothnagel on a Peculiar Pernicious Osseous Disease (Lymphadenia Ossium).**—The whole history of the case may be epitomized as follows:

*Course of Disease.*—A young man, æt. twenty-four, hitherto healthy, no hereditary taint, living in good hygienic circumstances, being first a cow-herd and next a soldier in a small Tyrol barracks, took ill one and a half year before death without any appreciable cause, painful attack occurring simultaneously with fever. The 'exact temperature is unknown till a month before death, but we are informed that the attack was accompanied with an outburst of sweating resembling the later facts of the case. These painful paroxysms were located at first to the breast, gradually extending over the haunches and lower extremities, invading the upper limbs in the latest period of the disease. The painful attacks must be acknowledged as pointing to the bones. The attacks returned at the commencement of the disease, with

wide intervals somewhere about two weeks, with excellent health (subjective) between the attacks; later, however, the paroxysms appeared more frequently and with greater intensity, occurring every second day, and usually took place in the evening. Exact observation a few weeks before death, gave the disease every appearance of an intermitting one, as occurs in malaria, and in this case would have been clearly defined as a tertian type. The patient was pale, emaciated, white; at the same time, several of the bones, particularly the sternum and the extremities, were greatly thickened and swollen. Examination of the individual organs revealed only a right-sided exudative pleuritis of a moderate character, which gradually increased till death. Examination of the blood revealed oligocythæmia and oligochromæmia, with a slight enlargement of the spleen and swelling of the lymphatics. The exhaustive condition was extreme during half a year of the illness before death.

The *post-mortem* revealed an interesting condition of the bones. Every bone of the pelvis, spine, shoulders, clavicles, ribs, sternum, and all the long bones of the extremities, with the carpal and tarsal were affected. The bones unchanged were the phalanges of the hand and feet, as well as those of the face and head, where symptoms during life were absent, though the latter bones were slightly affected.—*Med. Press and Circular*, Dec. 30, 1891, and Jan. 6, 1892.

## REPORT ON NOSE AND THROAT DISEASES.

BY H. HOYLE BUTTS, M.D.

**Fischer (Louis) on an Early Method of Diagnosis in Diphtheria.**

—The importance of differentiating between diphtheria and tonsillitis follicularis is emphasized. Also the question of isolating the different members of the family to prevent infection. In establishing a differential diagnosis between these two conditions, one should remember the similarity of symptoms common to both; especially that the tonsils are the most favored location in each affection, the resemblance in appearance of the exudation, the temperature, the swelling of the lymphatic glands, and the general constitutional disturbance. In diphtheria the

presence of albumen in the urine should be looked for, although its absence does not speak against diphtheria. The most prominent observers have proven that Löffler's bacillus is always present in all typical cases of diphtheria, and that it exists only in this affection. Roux and Yersin have found, by subcutaneous injections of the Löffler bacilli into animals, that they can reproduce the same toxic symptoms and typical diphtheritic paralysis as observed in man. These bacilli have the appearance of small, slightly curved rods, about as long as tubercle bacilli, and twice as broad; the ends are at times swollen; spores have not been found.

They do not possess any movement and do not liquefy gelatine. The bacillus is not found in the blood of the patient, but only in the pseudo-membranes, and most readily in the oldest portions of the same. In the mouth and pharynx there has been occasionally found a bacillus resembling morphologically and in the culture the Löffler bacillus, which, however, is not virulent. The differentiation is easy, as the reaction of alkaline bouillon is not changed by this pseudo-diphtheritic bacillus, whereas, in the presence of the Löffler, the reaction is changed to acid. In order to make a proper examination the following apparatus is necessary: (1) a sterilized scissors; (2) a sterilized forceps; (3) a sterilized test-tube; (4) six to eight agar-tubes; (5) incubator or brood-oven. A piece of pseudo-membrane the size of a pin-head is large enough to make a stroke-culture on agar or blood-serum which has solidified in an oblique position, and is then placed in the incubator. A temperature of 70° to 107° F. is advisable for a rapid development, and this may be done in from twelve to eighteen hours. To prepare the specimen for a microscopical examination, take on a platinum point a very small part of a colony and stroke it on a cover glass, allow it to dry thoroughly, then stain it with ordinary methylin blue staining, and examine it with Canada balsam. By this method the bacillus can be studied, if it be present. The occasional occurrence of streptococci in the cultures can only be regarded as an accidental mixed affection, or as a complication, as, *e. g.*, pneumonia, pertussis, etc., which might often be the case. The author has concluded that the presence of the Löffler bacillus with the streptococci is to be regarded as a bad symptom, and in such cases would give an unfavorable prognosis.—*N. Y. Medical Record*, Dec. 5, 1891.

**Smith (C.) on the Treatment of Diphtheria.**—The author's method consists of a continuous inhalation of a vapor, composed of a mixture of carbolic acid, oil of eucalyptus, of each one part, and of turpentine eight parts. This is to be continued until the patient is well, and at the same time stimulants are to be employed freely to support the heart's action. The patient is placed in bed with a sheet arranged as a tent surrounding him. In young children and all laryngeal cases, steam should be used either by means of

special apparatus or a bucket placed at the foot of the cot, in which boiling water is renewed every half hour, day and night. Half a dozen pieces of linen, about a foot square, should be soaked in the mixture and one placed on the pillow on either side of the patient's head. These should not be allowed to come in contact with the skin. The other squares may be hung about the bed, and all should be kept moist with the mixture in order to impregnate the inspired air. It is considered advisable to have the subject breathe through the mouth, and if difficulty is experienced in maintaining this position, a cork placed between the upper and lower back teeth will keep the jaws open.—*Australian Med. Jour.*, Oct. 5, 1891.

**Earle (C. W.) on Paralysis of Diphtheria.**—The paralysis of diphtheria may be local or general. Tabulated as regards the frequency with which they occur, the author places them in the following order: 1st, paralysis of the palate and throat; 2d, loss of tendon reflexes; 3d, multiple paralyses; 4th, cardiac paralysis.

The symptoms in the palatal form are nasal voice, slow speech, snoring, difficult deglutition, and return of liquids through the nose. In many of these cases the throat is insensible to the touch. This form of paralysis usually terminates favorably in a short time, although a few deaths have been recorded by the descent of food into the lower respiratory tract. Knee-jerk, in many cases of diphtheria, is absent from the first day of illness. The involvement of a set or part of a group of muscles in different parts of the body is generally preceded either by some symptoms referable to the throat, or to loss of tendon reflexes. Almost all muscles may be involved, although only a few of a group are liable to be paralyzed at the same time. Paralysis of vision occurs in many cases, and the bladder is sometimes involved. Besides this, the walls of the stomach and the bowels are partly paralyzed, necessitating the use of every known means to overcome the induration and constipation.

The most serious form of neurotic disease that we find occurring as the result of diphtheria is the cardiac weakness. A week or so after all evidences of tonsillar or pharyngeal disease have disappeared the child may be suddenly attacked with

dyspnœa, cyanosis, extremely rapid heart, and die before medical assistance can be summoned. The rapidity with which this form of paralysis takes place, with the tendency diphtheritic inflammation has to produce necrotic and gangrenous lesions, lends support to the theory that a ptomaine, or a chemical agent produced by microbic action is in all probability the cause of this fatal following. In the treatment of these cases the recumbent position must not be relinquished for any purpose whatever. Treat the cases from the onset energetically, and as a local disease, and there will be less danger of paralyses either as complications or sequelæ. The best and most nutritious diet should be given the patient, and this, along with general tonics and stimulants, strychnia or nuxvomica and electricity promises the best results.—*Chicago Medical Recorder*, Dec., 1891.

**Prescott (W. H.) and Goldthwait (J. E.). A Report of 392 Cases of Intubation and 139 Cases of Tracheotomy Done at the Boston City Hospital.**

#### INTUBATION.

The details of the operation will not be entered into in this paper; suffice it to say, that, while at first the operation was done with the patient in the sitting posture, at present it is done with the patient lying down with a small pillow under the neck. In this position the operation can be done more easily, and the child more easily held.

Of the 392 cases, 312 died and 80 recovered (20.41 %); 36 cases were followed by tracheotomy, with three recoveries; there were 21 cases in which intubation was attempted, and where either the tube was not inserted or else the child did not breathe after insertion, so that tracheotomy was immediately performed, and these cases will be included in the report of the tracheotomies. Over ten per cent. of all the cases were moribund upon entrance to the hospital.

The age of the child has a very decided influence upon the chances of recovery, as in tracheotomy. This is shown in the following table:

Age.	Cases.	Recov.	Per cent.
Under 3 years	123	18	14.63
3-5 years	183	43	23.05
6-10 years	55	17	30.90
10 years and over	10	8	80.00

The average age of the cases that recovered was four years and six months, of fatal cases three years and nine months, and of all three years and eleven months. One case was twenty-seven years old, three were seven months; all died.

The early operation, after the appearance of laryngeal symptoms, does not seem to have the same effect on the recoveries as in tracheotomy for

In 210 cases oper'd upon the 1st day there were 42 recoveries.

60	"	2d day	"	15	"	
22	"	3d day	"	10	"	
10	"	4th-9th days	"	3	"	
88	where the time could not be ascertain'd				10	"

Two were hoarse and croupy for two weeks before operation (both died). One was intubed four hours after the first symptoms, which were laryngeal. The average time of operation was thirty-six hours after the appearance of laryngeal symptoms.

The average length of time that the tube was worn in those that recovered was five days and eighteen hours; the average in the fatal cases was two days and three hours; while the longest time a tube was worn was twenty-three days. The age has a decided influence upon the length of time that a tube is required, the younger the child the longer it must be worn. This is shown in the following table:

Age.	Average time tube was worn.
1-2 years	9 days and 19 hours.
2-3 years	8 days and 6 hours.
3-4 years	5 days and three hours.
4-5 years	4 days and 14 hours.
5-6 years	4 days and 19 hours.

#### TRACHEOTOMY.

Tracheotomy was done 139 times; 82 being primary, with 11 recoveries; 36 following intubation, with 3 recoveries; and 21 following attempted intubation, with 2 recoveries; 19 cases were moribund at the time of operation.

In comparing the ages it is true, as with intubation, that the younger the child the less favorable is the prognosis, as is shown in the following table:

	Cases.	Recoveries.
Under 3 years	45	4
3-5 years	58	7
6-10 years	19	5
Over 10 years	10	0
Unknown	7	0

In 53 cases operated upon the first day after the appearance of laryngeal symptoms, there were four recoveries; in 31 cases on the second day, six recoveries; in 16 cases on the third day, two recov-

eries; in 7 cases on the fourth day, one recovery.

The character of the discharge from the tube was of great value in prognosis; for in 34 cases where the discharge was thin and abundant, there were 13 recoveries; in 46 cases where the discharge was gummy at some time, there was one recovery; and in 14 cases where the discharge was suppressed at any time, there were no recoveries. The average length of time the tube was worn in those cases that recovered, was nine days and five hours; and in all cases three days and three hours. (This average does not include the case in which a tube is still worn, two and one-half years after operation.) Two cases had diphtheria of the wound, one recovered. Five had convulsions, six were delirious, and two had subcutaneous emphysema; all died.

#### TRACHEOTOMY.

	Cases.	Recov.	Per cent.
Lovett and Munro's Series . . .	21,853	6,135	28
Romme's Series . . . . .	1,559	605	38.8
American authors . . . . .	367	98	26.7
English authors . . . . .	23	9	39.13

These, with the 139 cases reported in this paper, make a total of 23,941, with 28.67 % of recoveries.

#### CONCLUSIONS.

Three hundred and ninety-two cases of intubation and 139 cases of tracheotomy have been reported, with a mortality-rate of 79.59 % in the former and 88.5 % in the latter; 2,815 cases of intubation and 23,941 cases of tracheotomy have been collected and analyzed, showing comparatively no difference in the mortality-rate of the two operations. The results depend more upon the nature of the epidemic than upon the operation. With intubation the results depend more upon the skill and experience of the operator than with tracheotomy.

Thirty-seven cases were seen at least a year and a half after recovery from intubation, with perfect voice, and with nothing that would indicate any ulceration from pressure of the tube.—*Boston Med. and Surg. Journal*, Dec. 31, 1891.

**Abbott (A. C.) on Further Studies upon the Relation of the Pseudo-Diphtheritic Bacillus to the Diphtheritic Bacillus.**—This paper is so exhaustive that it would be impossible to do it justice without reproducing it in full.

The reader is referred to the Oct. and Nov., 1891, number of the *Johns Hopkins Hospital Bulletin*.

**Ingalls (E. F.) on Surgical Treatment of Diphtheria.**—The author believes that the intubation is the operation to do first, especially as it does not prevent the performance of tracheotomy afterwards if it should seem necessary, as happens in rare cases. The physician doing intubation should have a tracheotomy set at hand so that he may be prepared to open the wind-pipe at once should loose membrane be crowded down by the intubation, and not removed when the tube is withdrawn. Fortunately, even in these cases tracheotomy is seldom necessary, for the membrane is usually withdrawn with the tube, or coughed out directly afterwards.—*Chicago Med. Recorder*, Dec., 1891.

**Johnson (Walter B.) on Intubation of the Larynx with a Report of Eighteen Cases.**—The author's paper includes the history of intubation from the year 1858, when Bouchot of Paris devised an operation which he termed tubage of the larynx, up to date and as perfected by Dr. Joseph O'Dwyer of New York. The article is profusely illustrated and will prove of value to all medical men interested in the subject of intubation. Special reference is made to the feeding of patients who experience difficulty in taking nourishment while the tube is being worn. Only three of the eighteen cases recovered, but the author considers this satisfactory, as the epidemic during which these cases were operated upon was especially severe. The tube was a source of relief and comfort to nearly every case operated upon and was well borne.—*Transactions of the Med. Society of New Jersey*, 1891.

**Allen (Harrison) on the Tonsils in Health and Disease.**—The object of the paper is to harmonize the descriptions of the normal tonsil with the accounts of its morbid conditions. It is an axiom in medicine that the best basis on which the clinical study of any organ can rest is an exact knowledge of its structure. The author endeavors to show that our conceptions of the tonsil are not in conformity with this axiom, and that a great many descriptions have been drawn up from hypertrophied and atrophied glands. The tonsil is an association of *diverticula* developed from the epithelial layer of the mucous membrane (Retterer, *Comptes*

*Rendus*, 1885, vol. i., p. 1284), in the walls of which are grouped *muciparous glands* and *lymph-follicles*. Resulting from this association the tonsil is marked by the mouths of the diverticula, which open in a uniform manner upon the surface of the mass. The various tonsil groups differ from one another only in the arrangement of the diverticula. Thus in the lingual tonsils they are single, in the masses occupying the tonsillar space and the roof of the pharynx they are compound. In describing the tonsil, anatomical and clinical writers are often at variance in the use of terms. The author believes the following to be correct as they have definite meanings: diverticula (gland), follicle (vesicle) and crypt (pouch or pocket). The morphology of the tonsil is disguised to a remarkable extent by the products of diseased action, and it is not always easy to make out the details of the general plan. He agrees with Luschka that any comparison of the tonsil with an almond-shaped body is misleading, and that the cryptose or pocket form, with or without associated ridges of lymphoid tissue, is common, while the foliate form is rare. The variation most commonly seen is a rounded or elliptical mass—of which the largest is also its vertical diameter—placed in the tonsillar space a little above the level of the tongue. The organ is slightly compressed from before backward and consists for the most part of a pocket or crypt—whose walls are greatly thickened—directed downward. The anterior wall of the pocket is covered with mucous membrane similar in every way to that lining the pharynx. Above the mouth of the pocket lies a mass which constitutes the "tonsil" of common language. This alone is cryptose.

Very commonly the tonsil above the pocket exhibits numerous communicating passages which are easily demonstrated in children. It will be recognized that in hypertrophy of the tonsil the lower smooth part is enormously enlarged, and can be distinguished by a sulcus from the cryptose mass. The almond-shaped mass, therefore, is but a portion of the tonsil and even this is continuous with the lining of the main crypt. At a point still higher up, placed slightly back toward the palatopharyngeal fold, lies a second, smaller, somewhat nodular body, which is distinct from the foregoing. This may be called the *velar tonsil*, and is probably the same

as the supernumerary tonsil referred to by the late Dr. E. Carroll Morgan. In some instances it becomes pediculated and may even suddenly slip away from its usual position and hang into the throat so as to interfere with speech and deglutition.

The author believes that the treatment of the affections of the tonsil should be based on the structure; that, this structure being of the character of recessions of mucous membranes from the general pharyngeal surface, attempts to restore such parts to their normal condition should be always borne in mind, and all canals or fistulous passages in the tonsils that are abnormal should be slit up; that closed tonsils should be opened; that abscission should be confined to the removal of the hardened cortex; and that, when such hints for the treatment of the tonsil are acted upon, the majority of the diseases of these glands are remediable.—*Am. Jour. of the Med. Sciences*, Jan., 1892.

**Schlefield (R. E.) on a Case of Herpes of the Larynx.**—The patient, a man forty-one years of age, when first seen complained of intense pain on swallowing, and a sensation of constriction about the throat. The dyspnoea although not very marked, caused him to breathe with the greatest trepidation. The eyes were suffused with tears, and the mouth, wide open, allowed the escape of large quantities of saliva. The *alæ nasi* and lips were red and slightly swollen. Voice hoarse and some cough. When attempting to swallow, the whole body as well as the face would writhe with agony. Great pain on the left side of neck, and pressure exerted anywhere in that region between the larynx and the ear caused intense suffering.

Temperature 103.4°, pulse 116, respiration 25. Laryngoscopic examination revealed the following conditions: The cords and ventricular bands were normal, as also was the right arytenoid and aryteno-epiglottic fold. The left, however, was redder, and presented a mass about the size and shape of three peas more or less fused together, and capable of being moved with a probe either to the laryngeal or oesophageal side of the ary-epiglottic fold, to the edge of which it was attached. The surface was reddened, quite smooth and glistening like that of a polypus. From their position and movability they were capable of producing the greatest trouble either in phonation or swallowing,

as when the epiglottis was depressed, they were pressed into the pharynx, while in phonation they overhung the orifice of the larynx. Cold compresses were applied to the neck, and the patient improved gradually. On the third day patches of herpes appeared on the left nostril and upper lip. The patient was discharged from the hospital two weeks later with a normal larynx, the herpes having healed. The case is peculiar, chiefly in the location of the first vesicles, which ran through the milky and purulent stages, bursting and leaving a base that became macerated and had the appearance of a white patch. The pain in the neck, most marked at the onset, subsiding earlier than the eruption, the salivation and the rapid fall of the initial temperature tend to confirm the diagnosis.—*The Lancet*, Jan. 30, 1892.

**Henderson (W. A.) on Herpes Tonsillitis as Manifested in North China.**—This condition, as described by the author, has been prevalent during the last two years, appearing simultaneously with epidemic influenza. The disease seemed especially liable to attack European residents, although occasionally observed amongst the natives. The following symptoms are usually present: The maximum afternoon temperature for the first week, from  $102^{\circ}$  to  $103^{\circ}$ ; second week, from  $101^{\circ}$  to  $102^{\circ}$ ; third week, from  $100^{\circ}$  to  $101^{\circ}$ ; and the fourth,  $100^{\circ}$ , there being in all a month's fever. The fall in the morning temperature is from  $1^{\circ}$  to  $1\frac{1}{2}^{\circ}$ . On the first day of fever there is headache and sore throat, after which no pain in

either region; very irritating cough for the next ten days. From the first the pharynx generally, but the soft palate especially, is studded with large herpetic vesicles; while the fever subsided the herpes persisted. The size of these vesicles varies from very minute ones, confined to the anterior pillars of the fauces, to those of extreme development distributed all over the pharynx.—*Edinb. Med. Journal*, Dec., 1891.

**Dabney (W. C.) on the Appearance of Nervous Symptoms in the Early Stages of Diphtheria.**—It is well known that neuritis, or symptoms pointing to neuritic trouble, occur late in the course of diphtheria, or as a sequela of the disease. Two cases have recently come under the author's observation, in which very marked numbness and tingling of the limbs, especially of the arms, commenced in the early stages of the disease. In the first case, this condition appeared on the second day after the deposit of the pseudo-membrane in the pharynx. There was no apparent diminution of tactile sense or of the sense of pain, nor was there any motor paresis. The tingling and numbness, however, were sufficient to cause great discomfort for three or four days, when it gradually disappeared. The other case occurred in the same family, and was precisely similar in character, except that the numbness appeared on the first day. There was at this time a small spot of membrane on one tonsil only. Both cases pursued a mild course and ended in recovery.—*Medical News*, Jan. 6, 1892.

## REPORT ON TOXICOLOGY.

**Mann (F. W.) on Salicylic Intoxication.**—J. K., a German laboring man, consulted me for an attack of subacute rheumatism. I prescribed a mixture containing two drachms of salicylate of soda in four ounces of peppermint water. Of this mixture the patient was instructed to take a teaspoonful every two hours. In accordance, however, with a belief somewhat prevalent among the Germans, that the more rapidly the remedy is taken the more speedily is the cure effected, the patient proceeded in the course of four hours to empty the entire contents of the vial. As a result of this excessive dose the patient

became rapidly hallucinated, manifesting delusions of persecution. During the evening of this day he became so unmanageable that his friends, unable longer to control him, sought aid from the police, the outcome of this being that the patient was incarcerated in a cell for the night. The next morning the patient again came under my observation, and the relatives and police, believing the man insane, questioned the wisdom of confiding him to a physician, and suggested the asylum. In obtaining the history, the ingestion of the excessive dose of the medicine came to notice, and the diagnosis of salicylic intoxi-

cation was made. The patient was therefore allowed to be removed to a hospital. During the next four days the patient manifested all the phenomena of delirium tremens. Visual and auditory hallucinations possessed him. He refused all food, giving as a reason that it would be useless to eat, as he was condemned to be hung. He gazed in a mirror and immediately broke it by striking with his fist the demoniacal image his own reflection suggested. After this he had to be forcibly restrained, and was therefore confined to his bed. His attention was incessantly concentrated upon freeing himself from the restraints which had been imposed upon him. When spoken to he responded pleasantly. He was neither coarse in speech nor action; his violence arose solely from the desire to elude his persecutors. His pulse was 130; his respiration was not visibly depressed. At the end of the fifth day the hallucinations gradually waned and disappeared, and the patient rapidly recovered his normal state of health. All trace of rheumatism had disappeared.—*N. Y. Med. Record*, Feb. 20, 1892.

**Prentiss (G. W.) on Exalgine Poisoning.**—The patient was a male, twenty-five years old. Ten centigrammes (1½ grains) were ordered every half hour, and 40 centigrammes were taken instead every half hour until four doses or 1.60 grammes (24 grains) were taken in two hours. No bad effects were experienced till after the fourth dose was taken. Then a gradual weakness came on him, though the heart beat violently and rapidly, and there was a profuse sweating, especially of the face. The heart rate ran up to 160, and a sense of impending death came on. Half an ounce of whiskey quickly relieved the symptoms.

**Prentiss (G. W.) on Intoxication from a Comparatively Small Dose of Cannabis Indica.**—Dr. L., dentist by profession, aged thirty-four years, nervous temperament, was suffering from an irritable cough which prevented sleep at night.

He was directed to take 5 drops of Parke, Davis, & Co.'s normal liquid of cannabis indica at bedtime.

The cough becoming troublesome, however, in the afternoon he took the 5 drops at three o'clock, and began to feel the effect of it at five o'clock, and at six o'clock I was telephoned for in great haste, as it was stated that he was very ill.

When I reached the house I found him in bed, oblivious to all surroundings, being vigorously rubbed by several attendants, and evidently excessively happy. He would sway back and forth, and laugh until the tears ran down his cheeks, then drop back on the pillow with an expression of heavenly ecstasy on his face.

I reassured the family that there was no danger, and prescribed bromide of potassium.

Desiring to know what the visions were that made him so happy, I shook him up roughly and shouted in his ear, to be sure and remember what he was seeing, that he must tell me about it in the morning.

The condition of ecstasy lasted until nine o'clock, when he fell asleep and slept soundly all night.

A full account is given of the patient's subjective sensations while under the influence of the drug, some of which were very curious. The next day he was all right.

**Prentiss (G. W.) on Poisoning by Camphor.**—M. C., a healthy girl, eleven years of age, called at a drug-store and asked for something to cure a cold.

She was given 5-grain camphor pills, with instruction to take one every two hours.

She took one at nine, one at twelve, and one at two o'clock.

Fifteen minutes after the last one she was sitting on a piano-stool, when she fell backward in a convulsion.

Shortly after, she vomited, the ejecta having a strong odor of camphor. The convulsions recurred soon after she was put to bed.

There was headache both before and after each convulsion. The pulse was weak.

She was given bromide of potassium and elixir of calisaya, and made a rapid recovery.—*Therap. Gazette*, Feb. 15th.

**Bartlett (F. P.) on Carbolic Acid Poisoning.**—On December 26, 1888, a child fifteen months old drank some crude carbolic acid from a bottle. Its parents being close at hand heard its cries, and the father snatched the child in his arms and ran to my house, not more than one hundred yards distant. Probably not more than two minutes could have elapsed between the taking of the poison and the time when I saw the child, and it was then totally insensible.

The pupils were much contracted, the

corneal reflex was absent, the breathing labored and noisy, the face pale and the lips cyanosed where not seared with the acid. The pulse was almost imperceptible and the child appeared to be on the point of death.

I poured an ounce or two of olive oil down its throat at once and injected  $\frac{1}{8}$  gr. of apomorphia into the arm. I then passed a No. 10 gum catheter down the œsophagus, and with a large brass syringe injected four ounces of milk and olive oil. On turning the child on its face with the head lowered this at once escaped again through the catheter, and in this way the stomach was repeatedly and quickly washed out, the first of the returning fluid smelling very strongly of carbolic acid. Ultimately about four ounces of the oil and milk were left in the stomach. Although the dose of apomorphia was a large one ( $\frac{1}{8}$  gr.) vomiting did not occur for more than an hour after its administration. The milk and oil then expelled had but a faint carbolic odor.

Sensation returned in the cornea after about two hours, the contraction of the pupil passed off, and in three hours from the time of taking the poison the child, in spite of the burnt state of the tongue, was able to take the breast. The tongue, fauces, and buccal mucous membrane were extensively burnt, and externally the burns extended around the mouth, over the chin, throat, chest, and abdomen almost as low as the umbilicus. The fingers also were burnt and there were various smears and finger marks over the cheeks and around the eyes. As to the quantity of acid swallowed I am unable to judge with any approach to accuracy. No convulsions occurred and the child made an excellent recovery.—*Austral. Med. Gaz.*, Jan., 1892.

**Smith (W. A.) on Chloroform Poisoning.**—On the night of the 4th of March, 1891, I was by telephone requested to see a woman at the police-station, the officer on duty informing me that the woman had poisoned herself. When I arrived at the station I found the woman in a semi-conscious condition, sitting on a bench, supported in that position by the officer who had brought her in. I was informed that she was supposed to have taken a dose of chloroform, with suicidal intent. I at once caused her head to be lowered, and loosened her corsets and other gar-

ments. She was at this time quite unconscious, the breathing slow but shallow, the pulse rapid and weak. The conjunctivæ were insensitive. Having no stomach-pump at hand, I injected hypodermatically one third grain pilocarpine, which in a few minutes produced emesis. There was a very strong odor of chloroform in the vomit. After the emetic had acted the pulse slowly began to improve, and as she could not swallow I at intervals injected hypodermatically six or eight drams of brandy. She was now laid on a bed, and as she apparently felt chilly, was well wrapped up in blankets and let alone. In about two hours she began to recover consciousness, and was soon able to tell that she had had an ounce bottle of chloroform, and desiring to end her life had taken some of it, she did not know how much. She had been able to walk about the streets for an hour, when she was found by the officer, leaning against a building, her knees hardly able to support her. With his assistance, however, she walked to the station, and there fell into the unconscious state.

Judging from reports in the medical journals that I have at my command, poisoning by chloroform is comparatively rare, and death from it seems rarer still. In some cases respiration has had to be kept up, or stimulated, by electricity or other means, but in this case the breathing although shallow for a time, never showed any tendency to stop.—*Phil. Med. News*, Dec. 2, 1891.

**Hielscher (J. A.) on a Case of Chloroform Poisoning.**—On September 5, 1891, I was hastily summoned to one of our hotels to attend a travelling man who had tried to commit suicide by taking chloroform. Upon entering the room a very strong odor of this drug was observed. On the bed I found a man, about twenty-four years of age, in a comatose condition. His face was pale, his respiration very slow and shallow, the pulse imperceptible at the wrists, a cold, clammy feeling of the body and lower limbs, and the conjunctivæ senseless. The pupils were *dilated*. There had been no vomiting, and, as he was unconscious, I could not use the stomach-pump or give an emetic. I then employed  $\frac{1}{8}$  grain of apomorphine hypodermatically, which in a short time produced the desired effect. The vomit was almost a gallon of beer (the patient had



been upon a spree), which was strongly impregnated with the drug. Being still unable to swallow, I gave him from time to time hypodermatic injections of brandy, and employed artificial respiration, at the same time surrounding him with hot bottles and blankets.

After several hours of this kind of treatment he improved slightly, but not to my satisfaction, and I then administered a quart of strong, hot, black coffee *per rectum*. This acted like a charm; the breathing became more natural, the pulse improved, and consciousness returned. In the meantime I had, by a catheter, withdrawn over a quart of urine, which also emitted the odor of chloroform.

The next day I had the patient removed to the hospital, and a week later I discharged him.

The points of interest are as follows: 1st, the amount of chloroform taken was two ounces; 2d, the time was seven hours after taking before medical aid reached him; 3d, dilated pupils, later on contracted; then natural; 4th, odor of chloroform in urine, breath, and vomit.—*Phil. Med. News*, Jan. 6, 1892

**Welsh (T.) on a Fatal Case of Corrosive Sublimate Poisoning.**—A young lady, nineteen years of age, took half a teaspoonful of corrosive sublimate, which she received from a druggist in mistake for pepsin, and lived four days after taking the poison.

**First Day.**—Afternoon. Vomiting every few minutes, which continued till midnight, with frequent discharges of blood *per rectum*. Complained of severe burning in the mouth and stomach, none in bowels. Pulse 140, and nearly imperceptible.

**Second Day.**—8 A.M. Purging, vomiting, and pain occurring much less frequently. Pulse 126, and fairly strong. 12 M. Pain ceased entirely. Vomiting and purging only at long intervals, without any signs of blood. Pulse 106. Evening. Seeming improvement was so great that she could hardly be persuaded that anything was the matter with her. She had lost all recollection of taking the poison and of its consequences. Pulse 98.

**Third Day.**—Same as yesterday afternoon. She got out of bed, was dressed, and was assisted to walk about the room. Toward evening, however, her mind became somewhat affected, as was shown by her asking a great many foolish questions,

though she seemed perfectly rational when talked to. Pulse 102, and not so strong.

**Fourth Day.**—2 A.M. Decidedly worse. Very restless, speech more difficult, mind more impaired, and every symptom showed that the end was near. About three hours before death (12 M) her restlessness became almost a frenzy, to allay which I gave her a third of a grain of morphine, which had the effect of quieting her and enabling her to die in peace, conscious to the last. No mercurialism. It is needless to occupy your space with a detail of the treatment. Suffice it to say, that I administered the whites of eggs liberally, milk plain, milk with flour boiled, infusion galls, stimulants, morphine, etc., as required.—*Med. World.*, Jan. 2, 1892.

**Carn (W. M.) on Coal-Oil Poisoning.**—The author writes: I was recently called to see a little girl about two years old, suffering from the effects of kerosene oil taken internally about an hour before I arrived at the place. Her parents said that she had taken up a bottle containing some of the liquid and drank some, but they could not tell how much had been swallowed. As soon as the child had taken the oil she seemed to be in a strangled condition, ejecting large quantities of a very thick, ropy mucus from the mouth; in fact, it had to be constantly drawn out to prevent suffocation. I at once gave as much as could be forced in of a solution of soap and water, followed by as much sweet milk as would be taken. The symptoms, after an hour, assumed something of an epileptiform character, although not so severe; the skin was deathly pale, and the pulse feeble, although at no time was there any vomiting or purging until some two or three hours afterwards, when I ordered a small dose of castor oil, followed by occasional doses of bromide of potash, to relieve nervousness. As soon, however, as the state of threatened collapse was over, the temperature commenced to rise until it reached 103° F., where it remained for about three hours, when it gradually sank to normal before twenty-four hours had passed, and after that time the child regained her appetite and has been doing well since, although it has now been a little over a month. I also noticed that the odor of the oil was very perceptible in the urine and eructations.—*Med. World.*, Jan. 2, 1892.

**Hydrocyanic Acid Poisoning.**—A man took 15 minims of dilute hydrocyanic instead of dilute hydrochloric acid. It caused nausea, with a feeling of giddiness, followed by loss of consciousness, with great failure of heart's action, with loss of pulse at wrist, and very irregular and rapid heart; also great respiratory failure, with very long intervals between respiration. Atropia,  $\frac{1}{16}$  gr., was at once injected as a respiratory stimulant, gave inhalations of ammonia, and also an injection of apomorphine hydrochlorate,  $\frac{1}{16}$  gr., and assisted with artificial respiration (Sylvester method). In the course of an hour and a half the man had regained consciousness, and made a rapid recovery, with no bad results.—*Med. World*, Jan. 2, 1892.

**Higgins (F. W.) on a Case of Poisoning by Cyanide of Potassium; Recovery.**—Mr. X—, aged thirty, druggist, at the first opportunity after a sudden family quarrel, took from a can of cyanide of potassium a piece larger than a lima-bean, threw it into a graduate with two ounces of whiskey, and drank it off. He immediately began to feel queer, "as if he were only two feet high," got upstairs, where he locked himself into a small room, and threw himself on a couch. In about ten minutes his partner discovered that he was inside and had the door broken open. His face then was purple, the pupils were dilated, the breathing was puffy. The man's eyes were wide open, but he was unconscious and bathed in a profuse perspiration. Whiskey, ammonia, and emetics were administered. No vomiting could be provoked. In fact no vomiting took place until four hours later, when he began to revive and when I first saw him. No one knew what poison he had swallowed, so no special antidote was administered. He was evidently sinking rapidly, when hypodermics of ether were suggested, which seemed to have an immediate effect upon the pulse and respiration. When I arrived, in response to a telegram, he could answer questions rationally but with difficulty. The skin was still cyanosed and the pulse very feeble. He then told me what he had taken, and how large a piece. Since his recovery, which is complete, he has kindly selected for me a piece as nearly as possible the size of that he took. It weighs  $19\frac{1}{2}$  grains.

The drug had been in the store for over

a year, but kept in a tight tin can. When we remember that at least fifteen grains were taken, about four hours after the last meal, and that no antidotes were used except stimulants, we must regard the case as remarkable.

The whiskey which he took with the cyanide very probably was a factor in the case, assisted perhaps by the hypodermic injections of ether.—*N. Y. Med Record*, Dec. 5, 1891.

**Harrington (A. J.) on Cocaine Poisoning.**—CASE 1. — Woman, forty-four, had used a 6-grain suppository of cocaine previous to an injection for piles. An hour and a half later the following conditions were present: The fingers of both hands were extended rigidly and peculiarly white; the right side and right lower extremity were numb-like and had a feeling of formication, but were not spastic. The left side was unimpaired; pupils dilated. She was quite sensible. There was great dyspnoea, with dryness of throat. The friends had resorted to the time-honored custom of rubbing the hands with whiskey, so I directed them to continue this treatment and I gave her a hypodermic injection of morphia sulph.  $\frac{1}{4}$  gr. and atropia sulph.  $\frac{1}{16}$ . In about half an hour she was perfectly her natural self.

CASE 2. — Male, twenty-seven, with painful micturition from urethritis. Contrary to advice he injected  $\frac{3}{4}$  i. of a 4-per-cent. solution into the urethra and bladder. Almost instantly the pain was gone. In about five minutes he felt a numbness in the gluteal and crural regions, with a sensation of fulness in the perineum and tingling of hands and feet. This soon spread throughout the whole system. The muscles of his legs gave way under him, and, being near the bed, he crawled upon it. There was now a buzzing feeling in the head, which was rather a delightful sensation, except that it was alarming. He tried to move, but had no muscular power. He could feel himself gradually becoming more powerless, and must have gone off in a profound sleep, which lasted until about 7:30 P.M., six hours after the injection. He was still very stupid, but managed to get to his telephone (he being alone in his office) and rang me up. When I arrived he was all right except for a feeling of tightness in the lumbar region. I gave him a hypodermic of  $\frac{1}{4}$  morphia, and next morning he was able to attend to his

practice. The heaviness in his lumbar region remained for several days : He had no more strangury.—*Canadian Pract.*, Jan.

**Noer (J.) on a Large Dose of Paraldehyde.**—On August 18, 1891, at about 6 P.M., while on my way home for supper, I was accosted by one J. H—, who desired me to give him something to put him to sleep. He declared that he had not slept for ten days. Knowing him to be a man who was very much addicted to the use of liquor, I concluded that he was on the verge of delirium tremens. I handed him the following prescription :

℞ Paraldehyde . . . . . gm. 10  
Syr. aurantii cort. . . . . gm. 30  
M. S. : Shake bottle and take one teaspoonful every half hour till sleep is produced.

At 9 P.M., same day the druggist called on me with the bottle which had contained the above mixture, desiring to know if it would be safe to refill, patient having sent down for another bottleful. I of course replied no, and started for the home of my reckless patient.

I found him in bed, wide-awake, and in a very happy frame of mind. He had taken the whole amount at once, he said, but added that he thought he needed about a quart more.

Aside from a slight delirious tendency and a little quickening of the pulse, the paraldehyde had produced no visible effects. I gave him three grammes pot. brom. in water, and left two powders of the same, containing one and one half gramme each, to be given one every hour if not quiet ; next morning I found him calm and rational. He had taken all the bromide, after which about two hours' sleep had been obtained. His breath smelled very strongly of paraldehyde, but in every other way he was apparently in a much better condition than in the evening before taking the medicine. As the maximum dose of paraldehyde is four grammes, or one drachm, I thought the case worthy of consideration as showing an unusual toleration of the drug.—*N. Y. Med. Record*, Dec. 19, 1891.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

**Derville (L.) on Varices of the Inferior Venous System.**—Author prints photograph of a man thirty years of age, showing enormous dilatation of veins of lower extremities and abdomen, looking like the coils of intestines beneath the skin. Family history negative. His mother affirms that the veins were prominent at the birth and that he had attacks of gastro-enteritis. At seven the veins in legs and abdomen began to enlarge.

Patient was inferior mentally and physically and suffered much from pains in legs. Ulcers appeared at the age of thirteen years. Skin of legs present cicatrices and pigmentation due to old ulcers.

Left leg not as well developed as right.

No pain at present time except when obliged to walk, no gastro-intestinal symptoms, no hemorrhoids, no hæmatisms.

The author considers the trouble due to an error of development of the inferior vena cava rather than a primary disease of the venous walls.—*Journal des Sciences Médicales de Lille*, Sept., 1891.

**Fort (J. A.) on Relapse of Strictures of Urethra after Operation.**—Strictures of the urethra after all forms of operation are subject to relapse. The choice of the operation is not founded on sufficient anatomical basis so that the surgeon is forced to let himself be guided by purely theoretical reasons.

Seven cases with treatment by electrolysis are reported and the following conclusions submitted :

1st. Linear electrolysis is a simple inoffensive operation, rapidly dilates the stricture of the urethra in a general manner.

2d. When electrolysis destroys the tissues of the stricture in the deep urethra, the cure is certain and radical.

3d. Observations show that electrolysis practised on patients who have already submitted to urethrotomy or to dilatation gives results which are more durable than those furnished by the two operations.

4th. When linear electrolysis is well done the canal has a tendency to dilate spontaneously for a long time after the

operation, contrary to that after urethrotomy or dilatation.

5th. One has then the right to affirm that a relapse is less likely to be feared after linear electrolysis than after the other methods of treatment.—*Répertoire de Thérapeutique*, Dec., 1891.

**Phocas (G.) on Varices of Lower Extremities and of Subcutaneous Abdominal Veins.**—Author shows photograph of a man aged thirty-one years with family history negative. At the age of seven he had typhoid fever, after which he began to have dilatation of veins of lower extremities and abdomen; abdominal veins corresponding to the superficial epigastrics and circumflex iliacs, the former extending nearly to nipple and the latter nearly to axilla, and so large that they resemble coils of intestines; same condition on both sides. There is a large venous tumor at each saphenous opening, and the veins of lower extremities enlarged with numerous ulcerations. Standing is almost impossible.

Interest of case: enormous development of veins in both lower extremities and abdominal region, and the history of typhoid fever which attacked patient at the age of seven years.—*Bulletin Médical du Nord*, Sept., 1891.

**Bryson (J. P.) on the Use of Salicylic Acid in the Treatment of Certain Forms of Cystitis.**—The writer recommends one sixteenth per cent. solution of salicylic acid for washing out bladder, where there is an excess of muco-purulent secretion coating its walls. It cleans the surfaces much better than any other substances that he has used. In acute cystitis where the coating is thin it is no better than boric acid. Where there is ulceration and tendency to hemorrhage it is harmful.

He also recommends its use in urethritis where small grayish muco-purulent masses are found about the mouths of the glands of Littré when in a state of inflammation.

It cleans the mucous membrane so that substances like nitrate of silver have a chance to reach the surface and act on the epithelial cells.—*Four. Cut. and Gen.-Urin. Dis.*, Feb., 1892.

**Brewer (G. E.) on the Dry Poultice in the Treatment of Epididymitis.**—The dressing consists in a moderately thick layer of cotton-wool applied over the inflamed testicles; this is covered by a

layer of thin rubber protective-tissue, so fashioned that it completely incloses the diseased organ with its edges extending on to the healthy skin of the scrotum in a manner to partly overlap, but not entirely inclose, the healthy side. This is secured by a snugly applied gauze bandage and the whole held in place by a suspensory. It was first suggested by Langlebert in a paper published in 1889.

The author has treated between twenty-five and thirty cases by this method during the past year and finds it very satisfactory.—*Four. Cut. and Gen.-Urin. Dis.*, Jan., 1892.

**Davis (G. G.) on Tardy Hereditary Syphilis of the Bones.**—The writer reports in detail, with illustrations, four cases of tardy hereditary syphilis.

These cases are well-marked examples of an hereditary syphilitic taint which is tardy in its manifestations. The affection is to be distinguished from ordinary inherited syphilis because in it the manifestations of the disease occur usually during the first three months after birth, while in tardy hereditary syphilis the symptoms may show themselves in childhood, youth, or even early adult age. In these cases the signs first showed themselves at the ages of seven, eight, six, and nine years, respectively. Fournier (*Syphilis Héritaire Tardive*) describes one case, that of a young man who was attacked at the age of twenty-six years. Of course tardy hereditary syphilis can manifest itself by affecting other tissues than the bones, but they are the second most frequently affected. Eye troubles are the most common, embracing nearly half of all the cases, while the bones, according to Fournier, are affected in 38 per cent.

The tibia is the bone most commonly attacked, and was affected in all the four cases here given.

In the treatment of these cases he mentions the value of mercury and iodide of potash. Personally, I like to give the bichloride of mercury in tincture of chloride of iron with some syrup, and iodide of potassium in solution of the strength of a grain to the drop. Syrup of iodide of iron, syrup of the hypophosphites, and tonics may also be found of service in the intervals when it is desired to suspend the administration of the more specific drugs. I hardly think the treatment should be solely and continuously an antisymphilitic

one, but rather combined with one suitable for strumous affections. Macnamara (*Diseases of the Bones and Joints*, p. 151) holds that, while the iodides tend to relieve the pains in the bones, they are not curative, and therefore he orders iodide of potassium and bichloride of mercury together in some syrup. He also advises surgical intervention at times. He states that a subcutaneous incision into a painful node is frequently attended with the greatest relief to the patient, and, when the pains in the bones persist in spite of treatment, he advises exposing them and making a linear incision with a Hey's saw. I did not have an opportunity of trying this in the first two cases, where it would almost certainly have been of service, and in the last two the symptoms improved under treatment to such an extent as to render it unnecessary. —*N. Y. Medical Journal*, Jan. 23, 1892.

**Kreider (G. M.) on Gummata of the Biceps, Brachialis, Kidney, and Epididymis, Simulating Malignant Tumors.**—The author, after detailed history of case suffering from the above condition, furnishes the following:

The conclusions from a study of this case and the results of treatment are:

1. This man was undoubtedly affected with syphilitic gummata of the muscle, kidney, and epididymis, appearing ten years after the primary infection.

2. The first development of the disease was extremely mild, and beyond a very slight scar on the penis left no marks on any part of the body.

3. That the indifferent use of specific medication served to check the disease, and during the time of temporary quietude of the poison he was married and became the father of a son.

4. The son shows only slight manifestations of hereditary disease.

5. The disease afterward developing without treatment, his wife became affected, miscarried several times, and has finally ceased to conceive.

6. Despite the fact that no correct diagnosis of his trouble was made, and that proper treatment was not applied, the disease ran rather a slow course, and now as a result of proper medication the man bids fair to make a complete recovery.—*Phil. Med. News*, Dec., 1891.

**Tyson (James) on the Medical Treatment of Cystitis.**—Acute cystitis is far less commonly met by the physician

than the chronic form, while its treatment is far simpler, and, I may add, more satisfactory, at least so far as the removal of the acute symptoms is concerned. Rest in bed is a primary and essential condition. Leeches to the perineum should be applied more frequently than they are. A poultice to this same region and over the abdominal region is always useful, while a brisk saline cathartic should never be omitted.

As the feverish state which always accompanies cystitis is more or less constantly associated with a scanty urine, concentrated and irritating to the inflamed mucous membrane, it is desirable at once to increase the secretion, and thus dilute it. Copious libations of pure water, to which the citrate or acetate of potassium is added, in 15- to 20-grain doses for an adult, should be allowed. The ordinary spirits of nitric ether in 2-drachm doses every two hours is an admirable adjuvant, and may be combined with the official liquor potassii citratis, which contains about 20 grains of citrate of potassium to the half ounce. Formerly the mucilage of flaxseed or flaxseed tea was much used as a diluent menstruum for the diuretic alkalies indicated, but I am doubtful whether it is any more efficient than a like quantity of water.

Where there is much pain and straining, as is often the case, especially where cantharides is the cause of the inflammation, opium is indispensable, always in the shape of a suppository, half a grain to a grain of the extract being thus administered, or a proportionate amount of morphine. Iced water injections into the rectum, or pieces of ice similarly applied, are very efficient in allaying the pain and irritation where additional measures are needed.

The successful treatment of chronic cystitis is a much more difficult task for three evident reasons: (1) the constant presence in the bladder of the urine with its irritating qualities, especially to an inflamed mucous membrane; (2) the difficulty in getting remedies to reach the inflamed surface; and (3) the pent-up inflammatory products, which in their decomposition often make the urine still more irritating by exciting in it ammoniacal changes.

- 1st. The irritating qualities of the urine may be diminished by the use of diluents, as already recommended in the treatment of acute cystitis. When it is proposed to go farther and add to the

efficiency of diluents, mistakes are often made, for in the chronic form the urine is already alkaline, or becomes so on the slightest addition of alkalies to the blood. Such alkalinity in turn favors decomposition, the effect of which is to convert the pus, if present, into a tenacious, glairy fluid, which the bladder cannot evacuate. The indication under these circumstances is to render the urine acid, if possible, although this is very difficult to accomplish.

Benzoic acid will probably do this in 5-grain pills, at least six a day.

The second indication is to medicate the inflamed surface. Two ways, of course, suggest themselves: (a) by the internal administration of drugs; (b) by the injection of medicated liquids into the bladder.

The best of these is the oil of sandal wood in 10-minim capsules at least eight a day, two before each meal and two at bedtime. The preparation known as Santal-Midy is better borne than other specimens of the oil.

The application of remedies to the bladder by injection can be conveniently considered in connection with the third indication—the getting rid of the products of inflammation, the pus and mucus, and the compounds resulting from their decomposition. Tepid water should be at first used, and the injection made through the

soft catheter, four ounces at a time. After a few injections with tepid water he adds a solution of salicylate of sod. in the proportion of one drachm to a pint. He also refers to boric acid, alum, and bichloride of mercury, beginning with 1 part in 25,000.

Where there is greatly enlarged prostate catheterizing is indispensable, and is often attended by most happy results.—*N. C. Med. Journal*, Dec., 1891.

**Cannaday (C. G.) on Hints on Treatment of Gonorrhœa.**—The writer advocates the following plan of treatment: In acute stages, anodynes, hot fomentations, citrate of potash, ℥xx.—3 ss., three times daily. An occasional suppository of opium and belladonna. Physical exercise should be avoided; diet and beverages light and non-stimulating. No injections should be used until all acute symptoms have passed away, which rarely occurs under two or three weeks. When injections are begun, they should be very weak; 2 drachms of a solution of half grain of sulphate of zinc in an ounce of distilled water is sufficient; this should be used as warm as can be borne, and retained not exceeding a minute. The greatest care should be taken to avoid injuring the mucous membrane by rough handling or by using the syringe.—*Virginia Medical Monthly*, Jan., 1892.

## REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY A. T. MUZZY, M.D.

**Hansell (H. F.) and Bell (J. H.) on a Statistical Review of the Proportion and Cause of Blindness in Thirty-two Thousand Eyes Consecutively Treated in the Jefferson College Hospital.**—The object of the paper is, in brief space, to show the proportion and cause of blindness occurring in a hospital unusually rich in the abundance and variety of material presented, and to notice some features of peculiar and distinctive interest to the profession of this country. Eyes were considered blind that possessed only ability to count fingers at two feet down to complete darkness. And on the other hand, eyes which showed a chance, however slight, of regaining in the future, however distant, any portion of sight, were excluded from the list of blind.

The most noteworthy features exhibited by these tables are: 1. The extremely low proportion of blind eyes to the aggregate of eyes examined. It must be remembered in explanation that a hospital is not an institution for the hopelessly blind, but the curably blind. 2. That the liability to blindness in males is 100 per cent. greater than in females. 3. That the per cent. of males blinded from surgical causes is but slightly higher (3 per cent.) than from medical causes, but that in females eyes blinded from medical causes are greatly in excess. 4. That the left eye is 10 per cent. more frequently the seat of fatal disease than the right. 5. That the third decade (20–30 years) of human life far exceeds all others in furnishing subjects of disease or injury fatal to sight. 6. That traumatism, includ-

ing unsuccessful cataract operations, gunshot wound, foreign body in the ball, and dislocated lens, was responsible for nearly 30 per cent. of the total number of the cases of blindness.—*Arch. Ophthalm.*, vol. xxi., No. 1, Jan., 1892.

**Michel (Chas. E.) on Jequirity a Perfectly Safe Remedy.**—At one time current literature teemed with articles for and against this remedy. But the majority, because of its apparently irregular action and supposed danger, are inclined to use it seldom and with apprehension, thus allowing it to fall into disuse. In 1884, De Wecker's method of employing it at his clinic was watched. On returning home, a *modus operandi* of my own was adopted, which has proved so satisfactory that there has been no occasion to modify it. It has been employed both in private practice and in public clinics. Very rarely did the reaction cause any anxiety, and no accident has occurred. Only ordinary precautions were taken to exclude glaringly inappropriate cases. The conviction has grown that where accidents have occurred they have been due chiefly if not entirely to an overdose of the remedy. Of course there may be danger if grossly misused, or if idiosyncrasy exists.

Have made by the druggist a four-per-cent. maceration of the bean in cold water, allow it to stand twenty-four hours in a cold place, then decant until a semi-milky fluid is obtained. If kept in a cool place the infusion will exert its full effect as long as its first acrid flavor persists—four to six days. After that, decomposition sets in and it becomes unfit for use. There is no hurry needed in cases where jequirity is indicated; they are chronic. To neither patient nor friends can the application of jequirity be entrusted. Shake the bottle; then lifting the upper eyelid away from the globe, instill a single drop of the infusion, allowing it to flow freely over the globe for thirty seconds, after which the patient must not rub the eyes. The case is seen twenty-four hours later, and in about five per cent. of the cases a characteristic jequirity action is obtained, with indications of commencing formation of the so-called false membrane; generally, however, there is only free lachrymation and a reddened conjunctiva; if this be marked, another similar instillation is made, but if the reaction is deemed insufficient, two drops are instilled and the lids gently rubbed for a

few minutes over the globe, and the patient seen again twenty-four hours later. This is generally sufficient. A third application of the same kind is made if somewhat more action is needed, but if only a slight effect has been produced, we feel secure that no intolerance of the remedy exists, and proceed to regular inoculation, which never fails, unless it be in some cases that have been recently subjected to the jequirity treatment. Wrap a piece of cloth about the tip of the forefinger and dip it freely into the infusion; then turn the lids and rub the indolent conjunctival surfaces more or less forcibly so as to remove some of the epithelium. In very chronic cases rub also as much of the globe as can be reached; a few quick brushes of the finger will be borne well enough without cocaine, which may be previously applied.—*Arch. Ophthalm.*, vol. xxi., No. 1, Jan., 1892.

**Würdemann (H. V.) on the Influence of the Reclining Posture in Fevers upon the Production of Otitis Media.**—All admit that the most frequent mode of propagation of inflammation from the naso-pharynx to the middle ear is by direct extension along the Eustachian canals. Any occlusion of nose or pharynx which interferes with drainage of the middle ear is also a prolific cause of otitis media. This is especially marked in children where the naso-pharynx is proportionately so much narrower than in adults. But there is another factor which is not so generally recognized. The recumbent position in any febrile disease, accompanied by inflammation of the upper air passages, leads to accumulations of secretion from the nose and mouth in the naso-pharynx, from which it is difficult to dislodge it. These accumulations decomposing set up irritations about the Eustachian canal which are readily transmitted. It is evident also that otitis media would not be so common a sequel of such diseases if some attention were paid to the removal of secretion from the naso-pharynx by a warm spray of Dobell's solution, salt and water, or other such simple means.—*Four. Am. Med. Assoc.*, Jan. 16, 1892.

**Spear (E. D.) on the Function of the Semicircular Canals.**—Högyes believes that the semicircular canals of the ear with the vestibular branch of the auditory nerve are a peculiar end apparatus regulating the movement of the muscles of the eye and probably of the other muscles of the body,

for the maintenance of equilibrium. Examination of a number of patients complaining of dizziness, and whose gait showed disturbance of equilibrium, showed an intimate connection between the sixth or abducent nerve and the vestibular branch of the auditory. All dizzy patients had exophoria of varying degree.—*Med. News*, Jan. 23, 1892.

**Pooley (T. R.) on Poisoning from Homatropine Used in the Examination of Refraction.**—No instance of poisoning by homatropine has previously been recorded, though many from the use of atropine. The following is therefore of interest :

A girl seven years old was examined for refractive condition. Homatropine, two per cent. solution, was ordered to be instilled every fifteen minutes for an hour, and the following day the second examination made. Four days later her family reported that on returning home from the second examination the child became very much flushed in the face, very restless, and both mind and senses very much disturbed. Her ideas came very rapidly, at first coherent but later quite incoherent and extravagant, and she saw imaginary objects. By the time home was reached the gait was staggering and the other symptoms more constant and marked. Her family physician put her under opium probably which ameliorated the condition, and the following morning she was much better though still nervous and tending towards the hallucinations. It was several days before she had regained her usual health.—*Med. News*, Jan. 23, 1892.

**Pooley (T. R.) on Intraorbital Cyst Probably Dermoid in Character with Account of Two Operations for its Cure.**—Encysted tumors in the orbital cavity are rare. Berlin, in 1880, published a list of all he could find reports of, namely seventy-three. An Irishman, twenty-three years old, on January 19, 1891, presented a tumor at the inner angle of his left eye, which he had noticed for ten years. No pain or discomfort attended it. Relief was sought from the disfigurement. An attempt was made to dissect it out, but when near the apex, either from pressure or inadvertent nicking, the contents gushed out, consisting of dirty, yellowish-white, cheesy matter as of an ordinary sebaceous tumor. It was thoroughly cleansed with antiseptic solutions, and sutured. After three days

it began to refill, and under pressure to discharge the same material, which was cleansed by syringing with bi-chloride solution 1-500 daily. In two weeks the condition had so far healed as to admit of dismissing the patient. But by May the tumor had again formed, harder and larger than before. Again under a general anæsthetic the attempt was made to dissect out the tumor, but when near the apex it again broke open. This time an irrigation or drainage tube was inserted, and daily irrigation of the sac was made, and pressure bandages applied during the night. In the course of a month it healed by granulations from the bottom and has not returned.—*Ophthal. Record*, December, 1891.

**Pooley (T. R.) on Operation for Secondary Cataract Followed by Irido-Cystitis and Consecutive Glaucoma.**—Dissection of the capsular remnants, which constitute secondary cataract, while rarely setting up inflammatory reaction, does occasionally do so. July 8, 1891, an operation for removal of cataract was made upon the right eye of a woman sixty years old. The cataract was not wholly ripe. Healing was without any pain or reaction. In two weeks she was discharged with V =  $\frac{1}{2}$  w + 15 D., and she could read Jaeger No. VI with + 18 D. Almost the entire pupillary area was occupied by a thin capsular membrane. In September this membrane had still further developed, and in a few weeks dissection was performed. The operation was unusually difficult, as the membrane was very tough, and considerable traction was made. In withdrawing the knife there was escape of a little fluid vitreous. A clear black pupil was secured. Pain began almost immediately with increase of tension. This was controlled by increasing amounts of eserine. But the glaucomatous condition increased whenever it was interrupted, as at one time when atropine was substituted to break up a threatening synechia. Gradually the tension became normal, but in its place cyclitis appeared, evidenced by tenderness to pressure over the ciliary region  $15^{\circ}$  to the inner side of the vertical meridian. This also subsided, so that by the close of November all tenderness had disappeared. Vision now =  $\frac{1}{2}$  w + 15 D. and w + 18 D.; she could read Jaeger No. 1 $\frac{1}{2}$ .—*Am. Jour. Ophthal.*, Dec., 1891.



**McCullough (J. W. S.) on Lachrymal Abscess with Fistula.**—In a child eight years old suffering for four months with abscess and fistula of the lachrymal duct peroxide of hydrogen was found a very efficient remedy for washing out the diseased sac. The diseased surface was opened up by an incision, then washed out daily with the peroxide and followed by weak astringent solutions. Healing took place in one month.—*Canada Lancel*, Jan., 1892.

**Shirley (J. A.) on Fatal Hemorrhage in an Infant after Scarification of the Conjunctiva.**—The child of colored syphilitic parents; two weeks old, was prescribed a weak zinc and morphine collyrium for an acute conjunctivitis. A month later, when seen for sore throat, the eyelids were found closed, and when opened considerable pus discharged. The mucous membranes were very greatly swollen. Free scarification was performed and sulphate of copper applied. Moderate hemorrhage took place but did not cease, although styptics and astringents of various kinds were employed until death occurred seventeen hours later.—*N. Y. Med. Four*, Jan. 2, 1892.

**Burnett (Swan M.) on Some Peculiarities in the Refraction by Tilted Lenses, Graphically Represented.**—The fact that a spherical lens produces astigmatic refraction when in a tilted position to the incident pencil, has been long known. The subject was first treated experimentally and mathematically by Pickering and Williams in 1875. The best guides on this subject in the English lan-

guage are Heath and Aldis. While experimenting with the phakometer of Snellen, some phenomena appeared to which nowhere was allusion found. The discovery was that while in a tilted spherical lens of our ordinary trial cases, there was an astigmatic action with two focal areas; these focal areas were not—or at least the posterior was not—perpendicular to the optical axis, or the incident ray. The posterior focal area was oblique to the incident ray, and in a direction opposite to the obliquity of the lens; that is, if the lens were inclined  $30^\circ$  in one direction, the screen on which the image falls must, in order that the image approach most nearly to a line, be rotated, not so as to be parallel to the lens, but  $30^\circ$  in the opposite direction. The phenomena are largely due to the causes that produce ordinary spherical aberration, though the use of diaphragms, unless very small, does not do away with the appearances entirely. In studying the changes in the form of the focal area—with a  $+10$  D lens, a gas-jet 20 ft. away, and a screen shifted from 10 to 7 cm. towards the lens—it is to be noted that instead of being horizontal it has a direction downwards and to the left (the left edge of the lens being nearest to the screen). As the screen approaches the lens the focal area assumes a screw surface when the screen is at right angles to the incident ray but 9 cm. from the centre of the lens. When the screen is 7 cm. away from the lens it is at a point called the anterior focal line of Sturm's interval.—*Am. Four. Ophthal.*, Nov., 1891.

## REPORT ON THERAPEUTICS.

**Shallenberger (H. M.) on Physostigma in Hiccough.**—In a recent issue of the *Edinburgh Medical Journal*, Mr. Smart calls attention to a case of obstinate hiccough from chronic alcoholism, so persistent as to prevent sleep and the ingestion of food. No relief followed the use of any drugs, except after the administration of dangerously large doses of morphia persisted in for six days. My object in this note is to assure the profession of the value of physostigma in these cases of obstinate hiccough, from whatever cause. The cases that I have seen have yielded to its influence within two or three days. The last case was precisely like the one

reported by Mr. Smart, and forty-eight hours' use of this drug settled the hiccough. Another case of hysterical hiccough, of three months duration, that had resisted all other agents, was speedily controlled in the same way. A good fluid extract was the form given. The dose is four to eight drops every two or three hours, pushed to the point of causing toxic symptoms.—*N. Y. Med. Record*, Feb. 13, 1892.

**Goldenberg (H.) on Gallaceto-phenone, a New Dermato-Therapeutic Agent.**—This remedy has been suggested as a substitute for pyrogalllic acid. The commercial name is "alizerine-yellow C." It is prepared by treating

pyrogallie acid with acetic acid in the presence of chloride of zinc. It is a yellowish powder which readily crystallizes in yellowish needles, scarcely soluble in cold water, easily soluble in hot water, alcohol, ether, and glycerin.

It is well known that pyrogallie acid is by no means a harmless drug. After its introduction into dermatological practice Neisser lost one patient after one application. The patient died on the third day with symptoms of intoxication. Vidal has likewise reported the death of a patient, eighteen years old, who had used a ten per cent. pyrogallie ointment for two weeks. This poisonous effect of pyrogallie acid is to be attributed to the great readiness with which it is oxidized in alkaline solutions (being so intensely reducing).

The new drug does not possess this quality and is absolutely harmless, as has been proved by experiments on animals.

It displays strong antiseptic qualities. A one per cent. solution added to chopped meat prevented its becoming putrid for twenty-one days, and destroyed the *Streptococcus aureus* within twenty-four hours.

Since the middle of October I have employed gallacetophenone, both in private and in dispensary practice, on at least thirty patients suffering from various skin diseases.

On account of its resemblance to pyrogallie acid, it seems to be indicated in psoriasis. I have been so much more inclined to use it in that disease, since Von Rekowski, who tried it in a few cases only maintains "that the effect of this new preparation (used as a ten-per-cent. ointment) is noticed within twelve hours."

Altogether, I have thus employed it in twelve cases of psoriasis—in all of them with good results. Within a few days the patches became paler and thinner, the desquamation ceased or became less, and involution took place in the centres. Usually after the lapse of from ten to twelve days only a slight hyperæmia was left. Within from two to three weeks the patches disappeared entirely without leaving any pigmentation.

A ten-per-cent. ointment did not produce any marked irritation or discolor the skin. It stains the clothes slightly yellowish, much less than pyrogallie acid or chrysarobin. I do not wish to go into the details of the cases, but would like to state that in a case of psoriasis of the face and scalp

it really acted like a specific. The eruption, which was quite profuse, disappeared within five days. A ten-per-cent ointment was applied twice daily. There was no other treatment.

Another patient with a universal psoriasis of sixteen years' standing, who applied to my department at the Mount Sinai Dispensary for some other trouble, was induced to use a ten-per-cent. salve, of gallacetophenone for the forehead and scalp, which were thickly covered with psoriatic patches. When he returned, two weeks later, there was nothing left but a pigmentation of the forehead, while the psoriasis of the body which had not been treated was *in statu quo ante*.

My results in a number of cases of eczema psoriiforme and seborrhoicum have been so gratifying and encouraging that I should like to include these affections in its field of usefulness.—*N. Y. Med. Jour.*, Feb. 3, 1892.

#### Grant (J. H.) on Unfavorable Secondary Effects of Sulphonal.—

Recently, I attended two cases of epidemic influenza (thoracic-nervous), one, a married lady of slight physique, who, after a week's illness, considered herself convalescent, but still suffered from sleeplessness—no sleep for forty-eight hours; sulphonal-Bayer, one scruple in four ounces of hot water, was given at bedtime, which, within a few minutes, caused profuse perspiration and, apparently, profound sleep. Next morning the patient awakened to find herself unrefreshed and completely prostrated, muscles of the arms and legs flaccid, and unable to turn in bed (voluntary effort wanting) without help. In addition she complained of great constriction of the head and pain, as if, the patient expressed it, "a corkscrew had been inserted" at the vertex. For some days the patient, owing to the muscular weakness, was obliged to remain in bed; in fact suffered a relapse of the influenza, although not having at any time left her room since first attacked.

The day following Case No. 1, the writer was called to attend a gentleman of middle age, who appeared to be convalescent from an attack of epidemic influenza—an excited imagination and inability to sleep were the subjective symptoms presented. Sulphonal-Bayer, one scruple dissolved in hot water at bedtime, was given, as in the previous case, and with the same immediate

action. On calling the next morning the gentleman was found greatly prostrated, hardly able to move a limb, and with the symptoms of constriction and "corkscrew" pain at the vertex, exactly coinciding with the history given in the first case. A relapse of some severity followed, lasting nearly two weeks. In both cases a rapid but weak and compressible pulse, was noted on the morning following the sulphonal. The sulphonal was preferred as a hypnotic agent because of the supposed total absence of any "injurious effect on the heart," even after continued use. That sulphonal, like all the other recent remedies obtained through the coal-tar series, has a depressant action on muscular structures (the heart included) is inferred; and its use contraindicated in all cases of prostration of the vital forces.—*Bost. Med. and Surg. Jour.*, Feb. 4, 1892.

**The Dose of Paraldehyde.**—In a series of letters to the *N. Y. Med. Record*, Jan. 30, 1892, differing opinions are expressed as to the usage of this new remedy. E. Gorton says:

In a practical experience of nearly four years in the continuous use of paraldehyde, I have yet to meet with a case in which a dose of two and one half drachms produced delirium or any untoward quickening of the pulse. I invariably exhibit two drachms of paraldehyde as an initial dose, and then increase to two and one half drachms if necessary. I have given in special cases three and one half drachms of this drug with no other than a quiet sleep-producing effect, but so large a dose I do not consider safe, and it must be used advisedly. I repeatedly give two drachms, followed in one to two hours by a similar dose should the first not be effective, and I believe it to be the consensus of opinion among those who have used paraldehyde and studied its effects that two drachms is the ordinary or proper dose.

P. V. Fancher relates the following remarkable history of tolerance to the remedy:

W. M.—, a patient, arrived at our Retreat in the beginning of August last, in a state of intoxication. He was much excited, and as I had known him for some time, I administered a dose of one ounce of paraldehyde in water, which I was obliged to repeat in an hour's time, the first dose having been perfectly useless in procuring sleep. Two hours later the pa-

tient was still awake, but having given two such large doses, I did not think fit to risk giving any more. At midnight, three hours after I had given the second dose, I found my patient sleeping tranquilly. At 7 the next morning he awoke, drank a little milk and lime-water, and again slept until 10:30 o'clock. He then awoke, and recalling his previous day's debauch, was in a very remorseful mood, and asked me for more paraldehyde, saying, "Let me sleep and forget." I refused, needless to remark; I did not consider it necessary to give any more.

To my great surprise the keeper in charge showed me a four-ounce vial found in the patient's room labelled "Paraldehyde." The druggist who had sold the drug to this patient told me some days later he had given four ounces on the same day he arrived at the Retreat. Therefore the man had taken six ounces of paraldehyde! And he had slept, with intervals of awakening, only about eleven hours.

This case I believe to be an exceptional one. But I am confident that more than four grammes can be given without any risk, and that very often this dose is an insufficient one.

J. Noer reported a case in the same journal, Dec. 19, 1891, where a man on the verge of delirium tremens took ten gm. (3 ijss.) of paraldehyde with no untoward symptoms. He regarded this as a very large dose. A medical gentleman has since written me that this is not an unusual dose, and quotes Bartholow as giving a dose at from 3 j. to 3 ijss. Dr. B. quotes Bartholow as follows: "To succeed it (paraldehyde) must be given in sufficient quantity, the maximum dose mentioned above (3 ijss.) has often been given without any after-trouble of any kind, and has often proved necessary."

This is certainly new, and if it be in accord with facts, is of importance, since paraldehyde is a new drug that has been comparatively little used.

He has never ventured to give more than 60 minims at a dose, and has often had good results with much smaller doses. If 3 ijss. can be given with impunity, it would be interesting to hear from a few cases in which this quantity has been administered in one dose.

**Mellish (E. J.) on Bromoform in Pertussis.**—Seventy cases, forty-seven in girls, form the basis of the author's

study. The dosage of bromoform is usually: for children three to four weeks old, 1 drop three or four times a day; for children up to one year old, 2 or 3 drops three or four times a day. In the main he has adhered to this dosage, but latterly found that smaller doses, repeated every two or three hours, night and day if necessary, appeared to give better results.

To sum up: In the series of seventy cases, of those who had coughed not more than one week before beginning the bromoform treatment, 7 improved in 3 days or less; 15 in from 4 days to a week, and one in 8 or 9 days. Of these, 1 was well in 7 days; 1 in 12 days; 1 in 14 days; 2 in 18 days; 9 in 21 days; and 8 in from 23 to 28 days. One died. Of those who had been coughing from 1 to 2 weeks, 2 improved in 3 days or less; 14 in, from 4 days to a week; 8 in from 1 to 2 weeks; 1 failed to improve. Of these 1 was well in 14 days; 2 in 17 days; 6 in 21 days; 8 in from 24 to 30 days; 1 in 35 days; 1 in 38 days: 3 passed from notice before complete recovery; 3 died—25. Of those who had been coughing from 2½ to 3 weeks, 5 improved in 3 days or less; 6 in from 4 days to a week; and 3 in 10 or 11 days. Of these, 6 were well in from 10 to 15 days; 3 in from 15 to 20 days; 3 in from 22 to 28 days; 1 in 62 days; 1 passed from notice before quite well—14. Of those who had been coughing from 4 to 5 weeks, 1 improved the first day; 1 the third day; and 3 on the fifth day. All were well in from 10 to 18 days—5. One had been coughing 8 weeks, improved on the first day, and was well in 14 days; 1 had coughed 11 weeks, improved on the fifth day, and was well in 28 days; 1 had coughed 12 weeks, improved on the first day, and was well in 9 days—3.

Leaving out the 4 cases lost track of and the 4 that died, the average time of sickness, preceding the administration of bromoform, in the remaining 62 cases, was 16 days; the average time elapsing from beginning of the treatment to recovery was 21 days. This gives an average course of 37 days, the average course without treatment being about 70 days.

Of those who died, the first, case 24, was an infant aged seven months, the case a severe one from the beginning. The second, case 41, sixteen months old, was, before and during the course of the disease, very ill from teething, cutting four molars

and the canines nearly simultaneously. She developed spasms and other symptoms of cerebral trouble early and they continued to the end. The third, case 52, an infant aged nine months, in the poorest of hygienic surroundings; the case was exceptionally severe from the beginning; had been ill two weeks when the writer was called, and did not receive the medicine regularly at any time, once being a week without it. The fourth, case 60, was a girl aged eleven months; had been ill nearly ever since her birth, and had pertussis nearly two weeks before the writer was called.—*Chicago Med. Recorder*, Feb., 1892.

**Wilcox (R. W.) on Cactus Grandiflorus.**—The histories of twenty-three cases of various forms of valvular heart disease are given in detail. The average dose of the remedy has been from 15 to 20 minims of the fluid extract three times a day. Wilcox concludes as follows: The drug has no cumulative action, nor is there any acquired susceptibility to its use. About six to twenty-four hours are required before its full physiological effect is observed, excepting in tachycardia secondary to other conditions, when two hours are sufficient for the appearance of its effects. It does not interfere with digestion, nor does it have any effect upon the urinary or respiratory system other than would be expected from its action on the heart.

The conditions in which cactus is especially useful are: 1. Cardiac weakness, when the heart has not acquired compensation for valvular lesion, or, having been compensated, muscular degeneration has taken place, so that now relative incompetency exists. In other words, where a pure cardiac stimulant is required, cactus is indicated. Such cases are cardiac weakness in convalescence from typhoid fever, when change of position induces syncope; angina pectoris of purely cardiac origin and of asthenic hearts; simple eccentric cardiac dilatation, such as found in pericarditis from paralysis of the cardiac muscles underlying the area of pericardial inflammation.

2. The functional cardiac diseases resulting from tea, coffee, tobacco, and alcohol, the palpitations of dyspepsia, neurasthenia of the climacteric, exophthalmic goitre, morphinism, sexual exhaustion, and, to a less extent, those of anæmia, are relieved; some of these cases being those of purely functional disturbance, atony of cardiac

muscle from deficient innervation, others being true degeneration of cardiac muscle, and thus belonging to the first class. There are the irritable hearts, when palpitation is of emotional origin; these are the cases where cactus makes the pulse regular, because through its action upon the sympathetic the nutrition of the heart is improved.

3. The "slow" hearts, when there is over-stimulation of the pneumogastric, or marked degeneration of the muscular wall of the ventricle. These are the hearts formerly so refractory to treatment, the hearts in which digitalis is absolutely contra-indicated.

In all cases the tension of the pulse is increased, but its breadth is unaltered, so that the work of the heart is not made greater by contraction of the arterioles, as is the case in the administration of digitalis. This increase of tension is due to the fact that more blood is propelled through the arteries under the influence of cactus, and the increased arterial tension results in prompt relief of venous congestion. In old rheumatic hearts pain is relieved because this pain is merely a symptom of a heart that is relatively incompetent, and the tonic effect of cactus is to relieve this incompetency; and this is the guide to its administration in valvular lesions. In mitral stenosis, however, it is absolutely contra-indicated; owing to the shortening of the diastole, sufficient blood cannot flow into the ventricle to result in an efficient ventricular systole. In aortic regurgitation, however, it is the drug *par excellence*, because the marked shortening of the diastole regurgitation into the left ventricle is lessened. In other words, the aortic regurgitation, cactus is indicated and digitalis absolutely forbidden; in mitral stenosis cactus must be avoided, while digitalis should be administered—the one drug having its use when the other would be harmful. In other lesions the guide for administration lies in the relation which the propelling force bears to the work that it is called upon to do, and success in the administration of cactus means a disappearance of symptoms of cardiac insufficiency.—*Postgraduate*, Feb., 1892.

Pepper (W.) on Firwein.—The supposed ingredients of this liquid are said to be: in each drachm, phosphorus  $\frac{1}{16}$  gr., and iodine and bromine, each,  $\frac{1}{4}$  gr. The liquid in which they are dissolved is ap-

parently a balsamic elixir. The writer says:

Although it is doubtful whether the phosphorus remains unchanged in such a preparation, I have found so much difficulty in securing a liquid form of phosphorus which will be well received by the stomach, that I have made quite extensive trials of the above preparation. I found that it was well tolerated in most cases, and that it seemed productive of good results, especially in cases of torpid circulation with subacute gastric catarrh, and also in cases of subacute bronchitis with a relaxed and atonic state of the system. Accordingly, I have had imitations of this preparation made by several well-known pharmacists, and, for over a year, have been prescribing them with considerable satisfaction. The above-named ingredients may be dissolved in simple elixir, in which case the preparation may properly be styled "compound elixir of iodine"; or else an elixir of balsam or of white pine may be used, to which the name of "compound elixir of pine" might be appropriate.

The remedy should be taken after meals, and should be moderately well diluted. It is better to begin with a small dose, say twenty drops, thrice daily, and to gradually increase it according to the tolerance of the stomach and the effects of the remedy. I believe a trial will give satisfactory results.—*Univ. Med. Mag.*, Feb.

Evans (H. Y.) on Distant Action of Glycerin in Suppositories, etc.—My object in relating the following case is to try to throw some light upon the subject of the action of glycerin upon the bowels, the instance given seeming to show that the laxative effect of a glycerin suppository or enema is not confined to the parts with which it is brought in contact.

Mrs. —, aged forty, a multipara, had carcinoma of the fundus of the uterus for more than one year, and during the last three months of her life all her alvine discharges were passed through the uterus and vagina. Neither cathartics nor enemata produced any fecal discharge from the rectum.

On one occasion, when she became uncomfortable from accumulation and hardening of the discharge, I introduced a large glycerin suppository into the rectum. Within half an hour it produced a copious and semifluid stool through the uterus and vagina, *but no discharge whatever from the rectum.*

I subsequently had the privilege of an autopsy. We found that the diseased fundus of the uterus had become adherent to, and ulcerated into the narrowed colon at its sigmoid flexure, almost severing the continuity, and detaching the mucous lining of the colon from that of the rectum, and *totally obstructing* the upper end of the latter by organized deposits.

As far as one instance can, this one appears to prove that the effect of the glycerin, though originating in the rectum, is not confined to it.—*Phil. Med. News*, Feb. 20, 1892.

**Caillé (A.) on Bromamide.**—This is a new antipyretic and antineuralgic remedy. It is in the form of colorless needle-shaped crystals, nearly odorless and tasteless, insoluble in hot or cold water, slightly soluble in cold alcohol, and soluble in sixteen parts of boiling alcohol. Chloroform, ether, and the fixed oils dissolve it, but it is insoluble in benzine. Its action toward litmus paper is neutral. It is a very stable compound, not being affected by any of the ordinary reagents. It melts at  $243^{\circ}$  F., and volatilizes at  $310^{\circ}$  F. without change, subliming in beautiful feathery crystals.

Bromamide was administered in the following class of cases: Typhoid fever, acute articular rheumatism, chronic rheumatic arthritis, chronic nephritis, acute fibrinous pneumonia, rheumatic fever with acute endocarditis, general and localized dropsy due to hepatic, renal, or cardiac disease, and diverse forms of neuralgia; and special attention was given to a possible antipyretic, diuretic, diaphoretic, antineuralgic, and sedative action of the drug.

Bromamide was administered symptomatically in a number of cases of neuralgia from various causes.

1. Compression myelitis, with intercostal neuralgia. No beneficial effect from 10 to 20 grains of bromamide.

2. Premenstrual headache, 15 grains of bromamide; marked relief in two hours.

3. Reflex hemicrania from carious tooth; 15 grains of bromamide; relief in three hours.

It will be seen from a perusal of the foregoing that the trials thus far made are encouraging, and may warrant further experiments, especially in other forms of disease.

Bromamide has the power of reducing the temperature in most cases of febrile

disease from  $1^{\circ}$  to  $2.5^{\circ}$  F., without the excessive sweating as produced by other antipyretic drugs. It has, according to the above-recorded experiments, no pronounced diuretic action, and it is, so far as could be ascertained, free from unpleasant symptoms as regards the digestive tract. The lancinating abdominal pains noticed in several of the severe forms of disease cannot fairly be attributed to the use of bromamide, because such phenomena were never observed when the drug was administered to healthy subjects.

Bromamide can safely be given in 10- to 15-grain doses (0.6 to 1) several times a day, as an antipyretic and antineuralgic to adults, and in doses of from 1 to 5 grains (0.06 to 0.3) to children. It may be given in capsule, in wafer, or dry upon the tongue, or suspended in a fluid.—*N. Y. Med. Jour.*, Feb. 20, 1892.

**Bradley (E. N.) on a Novel Use of a Benzoinol Solution of Menthol.**—

A patient, sixty-four years old, of a rheumatic diathesis, who had been suffering for several days from the pneumonic and cardiac complications of *la grippe*, when an attack of acute prolapsed hemorrhoids ensued one night. The usual remedies having proved unavailing, either in alleviating the pain or in overcoming the spasm of the sphincter, it occurred to the doctor that spraying the hemorrhoids with a benzoinol solution of menthol, which had proved very efficacious in controlling a parietic tendency of the laryngeal muscles in the same case, might so stimulate the muscular structure of the hemorrhoidal veins as to accomplish a sufficient diminution in the volume of the piles to render them reducible. The spraying of the hemorrhoids was followed almost instantaneously by a cessation of pain, and by such a decrease in the volume of the tumors that their spontaneous reduction speedily ensued.—*N. Y. Med. Jour.*, Feb. 20, 1892.

**Thayer (W. S.) on Methylen Blue in Malaria.**—In September, 1891, following upon the reported experiments of Guttman and Ehrlich, experiments were made with methylen blue on the cases of malarial fever entering the Johns Hopkins Hospital. Five cases were subjected to this treatment:

Case 1 of tertian ague yielded promptly to one and one half grain five times daily of methylen blue. There was no rise of temperature after the beginning of treat-

ment, nor were there any organisms in the blood after the third day.

Case 2 of severe quotidian ague had one chill twenty-six hours after beginning treatment (methylen blue one and one half grain doses every four hours). There was slighter pyrexia without chill on the two next days. Temperature then became and remained normal. No plasmodia were present after ninth day.

Case 3 of chronic malaria had pigmented crescents and small intracellular hyaline bodies present in the blood. These disappeared in nine days under methylen blue in three-grain doses four times daily.

Case 4 of severe chronic malarial intermittent. The temperature fell to normal in a few days. There were occasional returns of slight fever. The organisms, same as in Case 3, did not disappear in forty-one days. Eleven days' treatment with quinine failed to do more than diminish them.

Case 5 of severe chronic malarial intermittent. The temperature under methylen blue fell to normal in a few days. Occasional slight rises of temperature recurred thereafter. The organisms (come as in Case 3) failed to disappear in twenty-three days' treatment.

The methylen blue was given in capsules in all cases. A slight burning sensation occurred with micturition, which yielded to powdered nutmeg given several times daily. The urine became blue under treatment, and the fæces turned blue when exposed to the air. The sweat and saliva were unaffected. The drug deserves further trial in malaria.—*Med. Standard*, Feb., 1892.

**Bowman (R.) on Local Treatment of Diphtheria by a Strong Solution of Permanganate of Potash.**—Without entering into discussion on so interesting a subject as the relative value of the various astringent, antiseptic, or solvent drugs, I wish to note in passing how very unequally different diphtheritic throats respond to local treatment, and this without regard to any standard of strength or constitution; so much so that in a percentage of cases one is tempted to imagine that the less the constitutional effect the greater the vitality of membrane, though the converse by no means holds.

I wish now to draw attention to a remedy which has been of the greatest service to me in the local treatment of the disease.

I have tried the permanganate in 15 cases (4 adults and 11 children under ten years) with a uniform rapid cure in from 2 to 8 days.

I find it best (1) to use a 3 gr. to  $\frac{3}{4}$  i. solution (the Condy's fluid being 2 gr. to  $\frac{3}{4}$  i.).

(2) To make at least three or four applications with a large camel's-hair brush directly to the membrane every hour for 8 or 12 hours.

(3) To have a thoroughly saturated brush without any drippings, as in infants if much fluid is swallowed it causes vomiting.

(4) To continue the painting at two-to-six-hour intervals till membrane, which is then black, thins away.

(5) And to treat internally with iron and the usual nourishing and stimulating diet. —*Austral. Med. Gaz.*, Jan., 1892.

**Mosetig-Moorhof (R. M.) on the Treatment of Inoperable Malignant Neoplasms by the Aniline Dyes.**—The dye principally used now is pyoktanin. The technique is as follows:

A special syringe, holding from two to three grammes, is used with long and wide cannulæ. A Pravaz syringe does not hold sufficient, and with a small needle greater pressure has to be exerted on the piston. Some special curved cannulæ are used for injections into the tongue. The needle must be most carefully rendered aseptic, and the syringe should be used for no other purpose. An aqueous solution should be used, and should be carefully filtered (if possible, through an aseptic asbestos filter), as it has always a tendency to precipitate, and so block the cannula. To avoid this, also, it is advisable not to use a more concentrated solution than 1 in 500. Disinfect the skin. The cannula should be plunged into healthy skin immediately beyond the tumor, and pushed in deeply toward the edge of the growth. When it has penetrated the latter, the solution should be slowly injected. As much as from two to twelve grammes of the 1 in 500 solution may be injected at each sitting, the injections being made either at one spot or at several, as may seem necessary. Where the surface of the growth is ulcerated, the needle must be introduced farther away and pushed deeper, as there is always an escape of the fluid from the surface of the ulcer. In tongue cancer it is important not to inject through the floor

of the ulcer. Such a proceeding may be followed by cellulitis from the introduction of septic matter from the floor of the ulcer along the track of the needle. In cases of enlarged submental glands or epithelioma of the floor of the mouth the injections should be made from the outside.

It has been found that the harder varieties of sarcoma and the carcinomata, especially the former, are likely to derive more benefit from this injection treatment than are the softer, more vascular, and rapidly growing sarcomata. The tumors of the soft parts are likewise more amenable to the treatment than are those of bone. Inflammation never occurs, unless septic material has been introduced with the cannula. Hence the precautions to render the instruments aseptic, and to avoid injecting through ulcerated surfaces. Some œdema may occur soon after injection, and persist for some days. This is probably due to the pressure of the fluid and its slow absorption from the sight of injection. Pain is rarely felt for more than a few minutes. It is due to the distension of the parts by the large amount of fluid injected. In some cases it may last an hour or two. In only two cases, where twelve grammes had been injected at one spot, there were some shiverings and a slight rise of temperature.

The benefits are thus enumerated: 1. Relief of pain, usually very marked and often very rapid. This is explained by Ehrlich's observation that in the living subject these dyes are found first of all to affect the nerve endings. This relief of pain after a few injections may be permanent. There is, however, no relief of the distressing pain in case of "carcinome en cuirasse." 2. Improvement of general health. The relief of pain leads to natural sleep, improved appetite, and gain in weight. 3. Mental improvement. It cheers and lightens a patient's end by exciting hopes and rousing him from hopeless despondency. 4. Improvement in function of various organs—e. g., the tongue may become movable in epithelioma linguæ, etc. 5. Shrinking of the tumor. Even in the softest and most rapidly growing tumors some retardation of the growth may be produced and perhaps some diminution in bulk. In suitable cases this may be very marked, and may either occur from breaking down of the growth or shrinking up of it. The two processes are usually

combined. Secondly affected glands may shrink as a result of injections into the primary growth. 6. Cicatrization of a malignant ulcer may occur, especially when the drug is directly applied to the surface. 7. A foul ulcerated surface will clean and fetor will diminish. It is therefore found in actual practice that shrinking of the growth, and even actual cicatrization, may be obtained. Sufficient time has not yet elapsed to enable any opinion to be formed as to relapses. Only two out of more than seventy cases treated by Professor Mosetig-Moorhof have up to the present time (one year from the beginning of the treatment) relapsed.—*Wiener Klinik*, Jan.; *London Lancet*, Feb. 20, 1892.

**Fry (F. R.) on the Treatment of Alcoholism.**—The majority of patients applying for treatment of alcoholism are found to be suffering from the more immediate effects of alcoholic intemperance. Our first task is to relieve them from this condition. In a small number of cases, no further care from a physician is desired or needed. In the remainder of cases, the great bulk of them, the important and difficult problems of treatment confront us when we have entirely or partially relieved the well-understood acute symptoms. The first task, the relief of the acute symptoms, is not always a simple one, yet its problems are insignificant compared with those of the other task of attempting to repair the damages of chronic alcoholism and to counteract the physical and moral influences, hereditary and others, which complicate so many of our cases. Most persons outside of the medical profession, and I fear, some within it, fail clearly to apprehend the distinction, and are therefore easily deceived by the claims of various so-called cures, quackish and otherwise.

If the ordinarily informed physician, knowing the physical effects of alcohol on the nervous tissues and organs of the body, stops to reflect that necessarily a considerable proportion of all alcoholic patients are suffering from grave organic disease, and that very many others possess hereditary defects which render them non-amenable, or nearly so, to treatment of any kind, and if he is further reliably reminded that we possess no agent which in any degree is specifically antagonistic to the effects of alcohol in the animal body, the situation is apparent to him at once; the proportion of



cures when the best results have been accomplished, cannot be large.

The more important defect in the treatment of alcoholism by the profession generally, is a lack or want of system. In this assertion I am sure I will be sustained by those who have seen the most and best results of methodic work in this direction. Why this absence of system? Simply because the facilities for it are not often within our reach. Without attempting a tiresome outline of what in my opinion or that of others should constitute an ideal system of treatment, I may more directly strike the gist of the matter by simply echoing the growing conviction of the profession, that alcoholic cases are not only best treated in establishments especially dedicated to this work, but that it is seldom worth the while to attempt to handle them without such facilities as these establishments should be expected to afford. Where are these establishments, is a pertinent question. I promptly reply they do not exist in kind and numbers adequate for our purpose. I venture the prediction, however, that coming years will witness the creation of them. Permit me briefly to mention the considerations which prompt the prophecy: First, this growing sentiment in the profession of the necessity for such institutions, and with it an equally increasing indisposition to assume the responsibility of attempting to test these cases outside of institutions. Second, there is a marked tendency to separate these institutions from insane asylums and general sanitariums for the treatment of nervous diseases. This is evident by the fact that sanitariums for the treatment of nervous diseases, as soon as they become financially independent enough to get along without the alcohol and morphine cases, often refuse to take them, and further by the increasing disinclination of this class of patients to patronize institutions where the insane are also treated. As a separate establishment the inebriate institution will appeal more forcibly to the profession and the laity as a proper place for the receipt of these patients. Third, the laity are rapidly learning the advantages of the institution-plan of treatment, showing their willingness to patronize such institutions; witness the numbers in which they are flocking to the various quack establishments. It is true they have gone under what have been

largely false representations, but they have gone seeking something for which they feel a need.

The demand for relief will remain unchanged when these humbug establishments have passed out of existence. And, incidentally, the profession does not need to be assured that they will pass out of existence. Their very notoriety is their death knell, for their sham will finally become so notorious as to kill them. In the meantime, however, they will have performed a service in impressing upon the people the vastness of this evil and the necessity of their supporting measures to cope with it on a large scale.—*Med. Fortnightly*, Feb. 15, 1892.

**Cates (B. B.) on Nitroglycerine in Reynaud's Disease.**—R. G., male, white, aged forty-two, physician; not very robust, of a spare habit; family history good; was healthy up to 1871-73, when his wrists and hands, ankles and knees, began to grow sore. Hands became cold, swollen, and blanched, this being followed by a livid-spotted discoloration, which would pass away, only to return again. After two or three years small ulcers, exceedingly tender, formed in the cushions of the fingers, on their continuity and on the bases of the last phalanges. These ulcers were dry, laminated, of a yellowish color, the skin at their periphery appearing as if it had been pinched up with forceps and twisted. On separating, the exfoliation would commence at the outer rim; the crust, which was conical, being attached at its centre by a minute threadlike tissue, would remain for months, hanging loose in the small crater-shaped exulceration, much like the clapper in a bell, stubbornly resisting all efforts at separation, with excruciating suffering when touched. The surface of exulceration on separation of scab appeared of a yellowish, glistening color.

In the course of time small blebs, filled with a sero-sanguinolent liquid, would appear on the sides of the phalanges in their continuity, and if unmolested would last for years. The ears were stiff, showing on the helix and anti-helix dry scales in various stages of exfoliation. Eventually small, dry crusts formed on the malleoli of both feet, which became so tender as to prevent patient wearing shoes; the ankles were weak and easily gave away when walking, the plantar surfaces of feet becoming embossed with corns, and toes being stiff.

Similar ulcers formed on tips of both olecranon processes, alternately healing and forming again, first on one, then on the other. The fingers are shortened, ankylosed, and flexed into the palm of the hands, the thumb of left hand being only one of fingers at all natural. The skin, over surfaces of phalanges, which is drawn tight, is sclerodermatous, parchment-like, and of a tallowy color, being movable only with difficulty. The nails are thickened, curved and brittle, showing on their free surface numerous fissures and grooves; their under-surface covers small ulcers, very tender when touched. The pain incident to this affection is excessive, and is described by him as similar to the pain following a burn, and is only relieved by warm poultices, or by warm-water applications; and when asleep of nights, if fingers become dry he is awakened by a renewal of the pains.

His face and upper part of body show an enlargement of small veins, the face appearing spotted like a trout, this showing more prominently after exposure to cold; while the root of neck and anterior surface of the thorax show beautifully the capillaries dividing and subdividing, like the branches of a tree. The veins of the abdomen stand out in bold relief, and over its lower surface on the buttocks and on flexures of thighs are wine-colored spots, variable in size, in some instances being as large as a half-dime. The hair of head is quite thin and the accumulation of dandruff enormous; pressure over scalp causes marked pitting. Examination of heart and urine is negative.

Six years ago he nearly lost voice, could scarcely speak above a whisper, deglutition being attended with considerable difficulty; voice, however, gradually returned, but was completely changed, being cracked and husky, and, indeed, any undue exertion will reduce the voice to a whisper. Superficial reflexes are absent, though patella reflex is present. Sexual powers greatly reduced, erection never being complete.

Upon the employment of nitroglycerin, commencing with the  $\frac{1}{100}$  of a grain and gradually increasing it to  $\frac{1}{10}$  of a grain three times a day, my patient grew better at once; as far as the suffering and ulcers were concerned, the sores healed and the pain disappeared as if by magic; and to use his own words, he "can now sleep of night like a child." In fact, he is a new man, for he can perform the routine duties

of life, which he has not done for years.—*University Med. Mag.*, Feb., 1892.

**Seale (W. H.) on Antifebrin in Premature Labor.**—Was called to see Mrs. G., multipara, Sept. 6, 8 P.M. Her husband told me she had colic. Found her with fever; temperature,  $103^{\circ}$  F. On waiting a few moments while examining another patient in same room, I heard those characteristic grunts and knew she had labor pains. Her confinement had been set for Oct. 15th.

On examination, head of foetus very low, with os uteri larger than a silver dollar, but decided she was only about  $7\frac{1}{2}$  months pregnant. She had been having chills and fever for several days. I gave antifebrin, 8 grs., to reduce temperature and with a view to allay pains also, then but 15 minutes apart and severe. Temperature declined nicely, and pains grew less and farther apart. I ordered the antifebrin to be kept up till pains ceased. Pains gradually subsided, and I put her on general treatment for the febrile disturbance.

Sept. 18th, pains commenced as before—treatment the same. Two doses of antifebrin were sufficient to cure pains. Was called hurriedly again on Sept. 22d, but when I got there—three miles—found I was too late, as I was preceded by a little girl.

Was called to see Mrs. W., multipara, Nov. 27th, 3 A.M. Pains had been frequent but had subsided some. On examination found the uterus was so high up, could hardly reach the os, which was dilated to size of silver dollar, and backward toward sacrum. After waiting several hours without any progress, elevated foot of bed and ordered antifebrin, 8 grs., every three hours till relieved—three doses sufficient.

I was called again Dec. 6th, 1 P.M., and found the membranes ruptured. Pains light and far between. An examination revealed a transverse position; by manipulation the position was corrected. Quinine to accelerate uterine action was given freely. The result was all that could be desired.—*Memphis Med. Month.*, Feb., 1892.

**Potts (C. S.) on the Use of Bromide of Ammonium and Antipyrin in Epilepsy.**—The writer has used this combination of remedies in some 20 cases. The results have been as follows:

During this period 30 cases have been treated by this method, with the following results: 19 have been greatly benefited;

8 did not return after the first visit, and 3 received no relief; of this latter number, 1 returned in four days and reported more spells than usual; he was not seen again. The second was a case of *petit mal*, and a third was under treatment but two weeks.

In all cases of epilepsy the benefits of any plan of treatment are to be sought out along two lines of inquiry.

1. Does it lessen the number of fits? Potts believes decidedly in the affirmative.

2. What is the effect upon the character and severity of the fits? Potts believes that the latter are much milder. The general effect upon the mental and physical condition of the patients. The doses for adults were: antipyrin, eight grains; ammonium bromide, twenty grains; children in proportion.—*Univ. Med. Mag.*, Feb., 1892.

**Bishop (S. S.) on Coffee as a Cause of Pruritus Ani.**—In some cases, at least, one kind of coffee will occasion intolerable itching and consequent insomnia, while another kind can be used moderately without giving rise to any unpleasant symptoms.

I have had a case under observation, in which Mocha coffee in minute quantities will produce pruritus, while pure Java, in draughts of two or three cups a day, can be taken with no ill effects. If a small amount of Mocha be added—say 12 to 25 per cent.—the pruritus returns.

In this case, I found two remedies that relieved the itching and prevented the insomnia. Pure camphor-menthol, applied to the affected parts, relieved the pruritus, but left an unpleasant sensation of heat. By mixing it with 50 or 75 per cent. of lanoline, the burning sensation was avoided. The same results followed the topical application of campho-phenique, which, I understand, consists of equal parts of camphor and carbolic acid.

A professional friend, one of our most voluminous writers and a popular post-prandial orator, tells me that he cannot

take champagne or wine without suffering from pruritus ani almost immediately after the beverages reach the stomach. Remembering this, I have often wondered at his easy, fluent language in entertaining an audience around the festal board at our professional banquets, at which his glasses were refilled as often as his neighbors.

I have known lawyers to say they could never plead a case with their piles down. How can an after-dinner speaker make an address abounding in wit and humor, and bouquets of rhetoric, while laboring with a pruritus ani?

**Brinton (J. H.) on Teucrium Scordium in Pruritus Ani.**—This remedy was introduced by a French physician some twenty-five years ago. The preparation I have made use of is the powdered leaf of the wild germandra, a plant of Southern Europe, the *Teucrium scordium*. The dose of the powder is 10 or 12 grains, suspended in water, taken three times a day, about half an hour before meals. The powder looks and tastes like a form of pepper, is an active stomachic, and stimulates the appetite. The effect of this drug, internally administered, I have found to be fairly satisfactory. In the cases referred to I have usually observed great relief to follow the exhibition for a week or ten days. At the expiration of this period the anal irritability and itching gradually decrease, and eventually disappear. With the alleviation of symptoms, the obnoxious habit of scratching is broken, and the patient ceases to be disturbed in his sleep. In more advanced cases of hemorrhoids, after the tumors have been fairly developed, I have not found that the drug exerts much influence. Its soothing and curative effect seems to be confined to the initial period of the disease and to the disturbed neurotic condition. How the remedy acts, I cannot tell.—*Therap. Gazette*, Jan. 15, 1892.

## BOOK NOTICES.

**The Treatment of Typhoid Fever.** By James Barr, M.D., Physician to the Northern Hospital, Dublin. 8vo, pp. 212. London: H. K. Lewis, 1892.

These pages, an introduction to which is written by Dr. W. T. Gairdner, are the recital of histories of fifty-five consecutive cases with only one death. The plan of treatment advocated is that of the "tank," or continuous bath. The general methods

are described in full, and the only point of special novelty is the author's method of applying cold water for its antipyretic effect. The "tank" consists of an ordinary wooden box six feet long, two feet ten inches wide, and sixteen inches deep, lined with lead, painted white and coated with a thick layer of shellac varnish. Each has a discharge pipe leading to the soil pipe, and thence to the sewer. The tank holds seventy gallons. Each is

provided with a sheet of bed ticking, which allows the patient to be submerged, but at the head there is a strip a foot wide which does not sink so low. The head of the patient is consequently kept above water. The patient is wrapped in a blanket with the head out and immersed up to the neck. As long as his temperature is not over 100° degrees the water need not be over 90° or 93°. As the body temperature approaches normal, so also should that of the water. Barr has not found it necessary to go higher than 98° nor lower than 90°. The patient is allowed to pass urine and feces in the tank. The latter are to a considerable extent absorbed and retained in the blanket. The latter is changed each day. Various devices are mentioned which lack of space prevents us from describing, to prevent the feces from being diffused through the whole mass of the water. The latter is renewed daily from supply pipes, hot or cold as may be needed. The patient is kept in the bath till convalescent.

This is the barest possible outline of the matter as described by Barr. We must commend his pages as valuable to the general practitioner. The present views of the profession in regard to the therapeutics of this common disease are well set forth, and a courteous recognition given of all authorities.

Messrs. F. A. Davis & Co. announce the early publication of two books which will form a noteworthy contribution to the literature of American medicine. The first is "An American Text-Book of Surgery," by Professors Keen, White, and others; and the second, "An American Text-Book of the Theory and Practice of Medicine," by Dr. William Pepper. The names of the authors and publishers alone will guarantee any commendation of the project we might feel inclined to give in advance. Pepper's system, published several years ago, was an epoch-making book in this country, and we are sure that every physician who has used it will be glad of a more extended acquaintance with the personal professional views of its distinguished editor. We await the advent of the new volumes with pleasure, and will be glad to again call the attention of our readers to them as soon as issued.

**Atlas of Clinical Medicine.** By Byrom Bramwell, M.D., etc. Vol. I., Part III.

We have already called attention to the first two parts of this monumental work. The third is in every way abreast of its predecessors. The affections here considered are progressive unilateral atrophy of the face, chronic progressive bulbar paralysis, ophthalmoplegia, molluscum fibrosum, and xeroderma pigmentosum. There is the usual wealth of clinical information, and the plates are true works of art. Messrs. T. & A. Constable, of the University (Edinburgh) Press, are the publishers. Price of each volume (including four fasciculi or parts) eight dollars; to be completed in three volumes.

**The Chinese: Medical, Political, and Social.** By Robert Coltman, Jr., M.D. 8vo, pp. 220. Philadelphia: F. A. Davis, 1892.

The author, who is an American missionary, tells the story of his life-work in a very entertaining

way. Medical writers are generally apt at description, and considered merely as a book of travels, this one would be worth reading.

The chapters on the medical characteristics of the Chinese include descriptions of leprosy, syphilis, and the venereal diseases, and an enumeration of the other maladies to which the race is subject. The book is at once instructive and entertaining.

**Consumption: How to Prevent It and How to Live with It.** By N. S. Davis, Jr., M.D. Pp. 143. F. A. Davis, 1892.

This small manual discusses the nature of phthisis, its causes, prevention, etc. Attention is given to the necessary mode of life, climate, exercise, food, and clothing proper to be secured. It is a book written for the patient expressly, and can be put with safety into his or her hands.

"I have found it," says the author in his preface, "difficult in brief conversations to impress upon consumptives the necessity of rigidly executing certain sanitary rules, whose fulfilment is essential to successful treatment of their disease. This is especially true of patients who live at a distance and are seldom seen. I therefore prepared for my patients a series of hygienic rules, with brief explanations of the effect of their execution. From these rules this small volume has grown."

Its pages contain much that might be carefully read with profit by every physician.

**The Etiology, Pathology, and Treatment of Diseases of the Hip-joint.** By Robert W. Lovett, M.D. 8vo., pp. 220. 56 illustrations. Boston: George H. Ellis, 141 Franklin Street, 1891.

This is the Fiske Prize Fund Dissertation, No. 42, and was awarded by the Rhode Island Medical Society on June 11, 1891. Acute arthritis and synovitis, gummatous osteitis, arthritis deformans, Charcot's disease, tumors, loose bodies, congenital dislocation, and hysterical affections are considered, but nearly half the space is well occupied in a consideration of hip-joint disease. It is not, I think, too much to say that this is by far the most carefully considered and complete essay on hip disease that has been written. No one is better fitted than the author to discuss the treatment from both a mechanical and operative standpoint, and no one among the American orthopedists is better fitted by careful and conscientious study to discuss the etiology and pathology of the subject. The literary work has been well done, and the book is free from the contradictions and repetitions which I pointed out in the author's joint work with Dr. Bradford. The paper is good, the printing is good and free from typographical errors, and the illustrations, most of which are new, are delightful; altogether it is the best bit of book-making one is likely to find.

JOHN RIDLON.

**Diseases of the Bladder and Prostate.** By Hal. C. Wyman, M.D., etc. Detroit, Mich.: George S. Davis, 1891.

Published in Physician's Leisure Library. In good plain type, the author avoiding technical terms and references, which make ordinary medical books so tiresome to read. It can be carried in pocket and read at odd moments, and will surely repay such perusal.

B. E. V.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## LEADING ARTICLE.

### THE TREATMENT OF PENETRATING GUN-SHOT WOUNDS OF THE ABDOMEN.

BY WILLIAM B. COLEY, M.D.,

Assistant Surgeon to the Hospital for Ruptured and Crippled; Instructor in Clinical Surgery at the Post-Graduate Medical School and Hospital.

This very important subject, which was brought so prominently before the surgical world in 1883 and 1884 by the brilliant operations of Kocher, Bull, and Hamilton, has proved to have more than a passing interest. The old *laissez-faire* doctrine was not given up without a struggle, and even now there are some distinguished French surgeons, *e. g.*, Reclus and Nogués, who still cling to it, and attempt to prove that it gives the better results. In spite of their teachings, the French surgeons in general are gradually adopting laparotomy, and the American method of treating gun-shot wounds of the abdomen is fast becoming the accepted method.

Since the publication of my last article upon the treatment of gun-shot wounds of the abdomen, with a report of 165 cases treated by laparotomy<sup>1</sup>, little has been added to the literature of the subject, although the number of cases has been constantly increasing and the mortality of the operation constantly decreasing.

The statistics of Reclus, as I have already shown, cannot properly be used as a test of the comparative value of the two methods of treatment.<sup>2</sup>

He has given us 88 cases of shot wounds of the abdomen supposed to be penetrating, with a mortality of only 25 per cent. treated by the expectant plan. He would

have us believe that out of 88 cases of penetrating shot wounds of the abdomen, 75.7 per cent. recovered under conservative treatment.

If this is true, it would be folly for us longer to advocate laparotomy, and the sooner we give up the operation the better for our patients. Yet we are not as yet forced to accept Reclus' statistics as the true estimate of the mortality of non-intervention, and the majority of surgeons still look upon a penetrating shot wound of the abdomen as a very serious injury, instead of the comparatively insignificant matter Reclus would have us consider it.

In my previous paper I collected 4,958 cases of penetrating wounds of the abdomen treated expectantly, with a mortality of 81 per cent.

The best surgeons for centuries have regarded the injury as almost universally fatal, and for this reason deaths (in civil life), looked upon as a matter of course, were not reported; while every recovery, from its very rarity, was published. The surgeon<sup>3</sup> who has reported the most recent case of recovery following operation, in New York, stated that he had previously treated two cases by non-interference, and that both had died. Neither was reported, as the result was regarded the natural one and excited no comment. U. S. Army,

<sup>1</sup> *Am. Jour. of Med. Sciences*, March, 1891.

<sup>2</sup> *Revue de chir.*, Feb., 1890.

<sup>3</sup> Dr. Newton, Charity Hosp. Alumni Assoc., April, 1892.

1865-1871, 20 cases of wounds of small intestine. *All fatal.* Surgeon-general's circular, No. 3. This will, I think, both explain the low mortality of Reclus' tables, and at the same time show how unfair it is to compare that mortality with the mortality following the operation.

To return to the operative method of treatment. The technique of the operation has been already so frequently explained that it is unnecessary to refer to it in these brief notes. The indications for operation are still debatable ground. Some advocate postponing the operation for "symptoms," others believe that if the external wound is in certain areas where the "small intestine" is unlikely to be wounded, the operation can be dispensed with; and still others believe that if several hours have passed before the patient is seen, and he is "doing well," abstinence should be followed.

A careful study of 174 cases treated by laparotomy that I have collected, has led me to believe that all of these restrictions upon the principle of operative interference in penetrating gun-shot wounds of the abdomen are unwise and open to serious objections. These objections I have already dwelt upon at length, and will merely refer to them here:

1. Many cases with numerous wounds of the small intestine are absolutely without symptoms until peritonitis develops, and the chances of success from operation are greatly diminished.

2. There are no "areas" of safety. The idea that the *penetrating* wound must be a *perforating* wound in order to be dangerous is a mistaken idea, as shown by an analysis of the cases. Wounds of the *small intestine* are not, as generally regarded, much more grave than those of other viscera. In 50 cases that were analyzed carefully I found wounds of the stomach, liver, colon, and small intestine; all showed the *same mortality* in *uncomplicated* cases, viz., 66½ per cent.

3. When the patient is seen several hours after the injury, and is "doing well," even then, I believe, it is the safer plan to enlarge the wound, see if it be penetrating, and if so, perform abdominal section. If the patient is in such good condition, the simple exploration will add little to the danger, and it may discover wounds of the viscera which might easily have proved fatal without such exploration.

Dr. Bull's first successful case is in point. Seventeen hours after the injury his condition was good, pulse and temperature normal, yet the operation showed seven perforations of the small intestine. I have said nothing as to the hydrogen gas-test. The space allotted to me is not sufficient to permit a discussion of its merits or defects. I will only repeat the objections to it which I summarized in my paper a year ago, and which have not yet been removed:

1. It is not an "infallible" index of the condition of the alimentary canal.

2. The danger of producing infection of the peritoneal cavity.

3. It shows nothing as to the condition of other viscera, wounds of which frequently demand operative interference.

4. It prolongs the operation, interferes with respiration, and adds to the shock.

5. It greatly increases the liability of the sutured wounds to give way.

The same objections hold true of air or any other gas that may be substituted for hydrogen gas.

These objections are not theoretical merely. I have collected 14 cases where the gas test has been used (including Dr. Burrell's case of air insufflation); of these 14 cases 11 died and 3 recovered.

Of the recoveries, in only *one* was the alimentary canal wounded.

Of the 11 deaths, 10 died of septic peritonitis. Dalton's experience shows both the danger of relying upon it when negative, and the almost equal danger of distension and extravasation when positive. It has not met with favor in the East, and is not likely to be generally adopted.

Before closing I wish to call attention to the recent brilliant showing of Dr. Dalton<sup>1</sup> of St. Louis. In the *Annals of Surgery*, for December, 1891, he reported four cases of shot wounds of the abdomen which he treated by laparotomy. They were all severe cases (38-44 cal. bullets), but were operated upon within the first six hours. All should be regarded as recoveries. One case had been doing perfectly well for five days after the operation, when he fell from a high bed to the floor, striking upon his abdomen. His temperature in a few hours rose to 104°, and death followed twenty-four hours later. The autopsy showed that one of the sutured wounds of the stomach had been ruptured

<sup>1</sup> *Ann. Surg.*, Dec., 1891.

by the fall. This series of cases is the best that has yet been reported.

The last 9 cases that I have collected show 5 recoveries and 4 deaths.

Of the total 174 cases, 115 died and 59 recovered, giving a mortality of 66 per cent.

Laparotomy was performed in 9 cases in which no viscera were injured; of these cases 6 made prompt recoveries, while in 2 of the fatal cases the operation was delayed until the fourth and sixth days, and then performed for purulent peritonitis.

# Conclusions.

Given a shot wound of the abdomen, the indications are :

1. *Exploratory incision* in the region of the wound to ascertain whether or not it be *penetrating*.

2. If penetrating, median *laparotomy* as *soon as possible* after the injury (unless contraindicated by severe shock).

3. Signs of peritonitis, just beginning or well developed, while diminishing the chances of success are by no means a contraindication for *operative interference*.

## EXTRACTS FROM RECENT FRENCH LITERATURE.

**Pécheré on the Bacillus of Influenza.**—The author has made a series of researches to find whether the bacillus of Pfeiffer is really the pathogenic factor in the pandemics of the past three years. The experiments have been on the sputa of five cases under close observation. The cases were not merely simple influenza, but rather those of the type in which nervous symptoms predominated. There was a general catarrh, with pains in the head and back, vertigo, complicated in four of the cases with pulmonary congestion or pneumonia.

In the five cases, a bacillus presenting all the characteristics of the Pfeiffer bacillus has been found. As could be seen in preparations colored with Ziehl's solution, the micro-organisms are present in great numbers, almost in pure cultures. A magnifying power of 1,200 diameters rendered them clearly visible. The identity, however, was only in morphology, and the author does not regard the question of pathogenesis as by any means settled.—*Four. de méd. et chir.*, March 5, 1892.

**D'Arsonval on the Injection of Liquids Prepared from Various Viscera.**—Brown-Séquard's testicular juice is not the only fluid of this nature which has been brought to the notice of the profession. It is now proposed to inject a pancreatic fluid for diabetes, a splenic juice for malaria, a suprarenal juice for Addison's disease, etc. M. d'Arsonval indicates at length the methods which should be followed in the preparation of these materials for injection. No antiseptic, so called, should be employed in the mixture. When the injections are to be made directly into the veins, the vehicle should be the normal

salt solution of 10–15 parts per 1,000; when the injections are to be subcutaneous, the extract, with an equal bulk of glycerine, ought to be added to two or three volumes of water.

The animal to be chosen is by preference the rabbit. It is to be killed by a blow on the neck, and the tissue from which the extract is to be made immediately removed. The latter, divided into pieces about a centimetre in diameter, is macerated from twenty-four to forty-eight hours, in about three times its weight of glycerine at 28° C., which is then heated to 48° C. and preserved in an air-tight bottle. At the end of this time a filtration is made through chamois skin, and is then placed in a carbonic-acid sterilizer submitted to a pressure of about fifty atmospheres. Finally the extract is submitted to a second filtration, and is then ready for use.

No experiments upon actual cases of disease with these remedies are recorded, and while some have been made upon animals, the matter has not yet become of any practical service to physicians.—*Le Courier Médical*, Feb. 27, 1892.

**Fromaget on the Prodromal Angina of Measles.**—The author combats the idea that the anginoid features of measles are to be regarded merely as a complication. He claims that they may precede, as in scarlatina, the appearance of the rash. Observations on seven cases have led him to make two forms of the affection, which is confined to the post-pharyngeal wall and tonsils, and which never appears on the soft palate.

1. The catarrhal form presents a general congestion of the pharynx, which is lightly

covered with mucus. The appearance is red and glistening. Pain is slight, and no difficulty is experienced in swallowing. The submaxillary glands are but slightly enlarged. The whole affection is so mild that it is often overlooked. It may disappear as the rash comes on, or may last throughout the disease. The prognosis is always favorable.

2. The pultaceous form shows a great enlargement of the tonsils and is covered with a grayish exudate resulting from epithelial desquamation. It is not adherent and can be easily removed. Beneath is found a reddened membrane overlaid with a new epithelial formation. A similar process takes place on the pharyngeal wall and also on the tongue, a fact denied by Despinet. The palate remains intact. The pains are intense. Infants refuse to nurse, and there is considerable pain on swallowing. The submaxillary glands are swollen and painful. The duration is variable. It may disappear after the appearance of the rash, but it may last a long time. The prognosis is less favorable than in the catarrhal form.

The diagnosis lies between this condition, scarlatina, and diphtheria, when we have the pultaceous form. In measles the larynx is generally at the same time involved. Oculo-nasal catarrh appears, while the temperature curve is characteristic.

The easy removal of the pultaceous layer suffices to easily distinguish the condition from the true adherent pseudo-membrane of diphtheria.

The treatment of the catarrhal form need rarely give any trouble. In the pultaceous form the most rigid antisepsis of the pharynx should be practised.—*Gas. heb. des sci. méd.*, Feb. 21, 1891.

**Despinet on Congenital Atrophy and Ectropion of the Left Kidney.**—In an autopsy recently held on a man who had died from cirrhosis of cardiac origin an interesting condition was found in the left kidney. The organ had sunk into the pelvis immediately in front of the sacrum and was considerably atrophied. Its weight was 30 grammes. The shape was very irregular, and its lobules, analogous to those of the foetal organ, only vaguely suggested the aspect of a normal kidney. The color was a grayish-yellow, and the capsule came off easily, leaving a smooth surface. Cross-section revealed the same color in the interior and a lamellar arrangement of tissue.

The pelvis, of normal appearance, extended in one direction toward a sort of hilum shut in between two lobules, while in the other direction it ran toward the surface of the parenchyma.

But the most interesting arrangement was that of the vessels. The renal artery was represented by several branches: the first came off from the abdominal aorta about one inch above its bifurcation; other branches, four in number, came from the common iliac and were distributed partly toward the space designated above as the hilum, and partly toward other parts of the organ. All these characteristics clearly indicate that the condition was a congenital one. The irregular lobulation is that of a kidney in the early stages of development. Nothing associates the atrophy with a nephritis in this kidney with a non-adherent capsule. The two divisions, cortex and medulla, preserved their normal relations, and there were no cysts or other traces of pathological processes.—*La Loire médicale*, March 15, 1892.

**Legroux on Hypodermatic Injections in Infants.**—The author maintains that such procedures are legitimate for the following reasons:

1. We may in that way use remedies which cannot be given by the mouth from their bad taste and from the impossibility of administering them in capsules or pills; such are the quinine salts, etc.

2. Where the remedy is introduced under the skin it has a more efficient action than where given by the digestive tract (ergot, caffeine).

3. The injection causing the remedy to penetrate very rapidly into the vascular system produces upon the nervous system either a stimulating action or quieting action—but sharply as ether, morphine, cocaine, antipyrine, etc.

The writer further justifies the method by arguments which do not apply any more to children than to grown persons, or, in fact, to the hypodermatic method in general. He gives formulæ for the practical use of all the remedies above named; also of creosote. In spite of the tender age of the patients, he claims that the latter never suffer any ill effects.—*Four. de méd. et chir.*, Feb. 25, 1892.

**Combemale and Lamy on Aortic Aneurism of Traumatic Origin.**—In a communication to the Société de Médecine du Nord, the writers reported an ob-



servation on a case of the above nature which died from slowly progressing hemorrhage. The patient was a manufacturer of chemicals, who complained of various indefinite sensations, especially of the gastro-enteric tract with constipation. Nothing was noted in his antecedent history, except that he had had an inflammation of the lungs, which had seemed to come on after violent exertion by lifting. On examination of the chest there were evident pulsations just beneath the sternum, in the median line between the two sterno-mastoid muscles. Corresponding to this area, there was made out by palpation and percussion a tumor occupying the region of the aortic arch. Auscultation showed an aneurismal bruit.

The patient died after some days, having had rectal hemorrhages and hæmatemesis. It was supposed in the absence of an autopsy that there was a constant though small leakage of blood from the tumor directly into the digestive tract—probably the œsophagus.—*Bull. méd. du Nord*, March 11, 1892.

**Desnès on the Employment of Solanine in the Affections of the Stomach with a Predominance of the Gastralgic Element.**—In a paper read before the Académie de Médecine, the author declares that this remedy is well calculated to render good service in painful affections of the stomach. It is a congener of such remedies as cocaine, chloroform-water, bromide of strontium, or calcium. In a general way it is inferior to morphine, though it has succeeded where the latter remedy has failed. This failure is due in many cases to the use of too small quantities, or because the morphine cannot be safely exhibited in sufficient doses to produce any distinct impression. Moreover, there is always the danger of the morphine-habit, to which some persons, especially hysterical and alcoholic subjects, are prone. Among this class of patients it is advantageous to have a remedy which can with benefit be substituted for morphine. A practical disadvantage is that the remedy is too expensive for general use.—*La France médicale*, March 25, 1892.

**Klemperer on Bacterial Poisons and Immunity.**—For some time the doctrine has been generally accepted that the harmful action of microbes is attributable to poisons resulting from their life history.

Experiments have enabled us to isolate these substances which present themselves under three forms. In the first place, we find basic substances, ptomaines, which certainly have no direct connection with the production of the disease. Next come albuminoids, which are closely associated with the history of diphtheria. These tox-albumins cause fever, but carried to a certain temperature and then inoculated into animals they preserve them against the affection in question. Moreover, it has been shown that the blood-serum of animals rendered immune can cut short an affection already declared. A characteristic of the tox-albumins is that at 37° C. they lose their toxicity, preserving meanwhile their property of immunization, which remains, although the temperature may be carried to 60° C.

Another category of tox-albumins is formed by the protein substances. To this class belongs tuberculin, and it is entirely rational to seek to utilize from a therapeutic point of view the proteins of microbes other than the tubercle bacillus. It is along this line that Klemperer has worked with the germ of pneumonia. His experiments have shown that the blood-serum of pneumonic animals possesses curative properties. In his last series he has endeavored to find out if the proteins of the pneumococci did not also possess curative properties. In pursuance of this end he has boiled cultures, filtered them, and isolated therefrom an albuminoid substance, which, injected in concentrated solution into rabbits, caused febrile reactions. Gradually the animals became accustomed to the pneumo-proteins and thereby immune against pneumonia.

The curative value of the pneumo-proteins has been determined in the following manner: With the injection of more or less concentrated protein solutions the animal has been rendered immune, and this result attained, the blood-serum of the animal has been injected into patients sick with pneumonia. In ten cases in which this was done the fever lessened and all the symptoms assumed a milder form.—*La Tribune Médicale*, March 3, 1892.

**Oddo on Certain Modifications in the Classic Treatment of Lead Colic.**—The writer regards the indications for treatment in an acute case to be:

1. The elimination of the lead from the system.

2. To so neutralize the quantity remaining as to render it harmless.

For elimination we have the biliary passages, the kidneys, and the skin. For neutralization we have the sulphur-baths, together with the internal use of the iodides.

The modifications proposed are as follows :

1. To use simple laxatives rather than harsh cholagogues.

2. To employ diuretics when the kidneys are healthy.

3. To scour the skin after sulphur-baths.

4. To use early and in large doses the protoiodide of iron.—*Marseilles Médical*, March 1, 1892.

## REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY A. T. MUZZY, M.D.

**Williams (R.) on How to Deal with Secondary Cataract.**—Instead of the usual method of discission, or the canula forceps, a small incision is made with the keratome a little exterior to the margin of a moderate-sized pupil. An ordinary iris forceps is then inserted and the opaque capsule drawn gently just outside the incision and snipped with scissors. The remaining capsule immediately receded, and there presented a round or oval hole through the capsule. And when the iris is normally contracted, none of the remaining opaque capsule is seen. And the fundus can be clearly seen through the opening. Flattering results were gained in three cases. Though there is the same tension exerted as in discission, yet the degree of tension is much slighter.—*Liverpool Med.-Chir. Jour.*, Jan., 1892.

**Hartridge (Gustavus) on the Electric Light and its Effects upon the Eyes.**—There are two principal forms of electric light used : the arc light, chiefly employed outdoors and in large stations and workshops ; and the incandescent, employed for general interior illuminations. The arc light is produced by passing the electric fluid between two carbon points, the light being most intense when the interval between these points is shortest. Some of the intensity is no doubt due to the combustion of the carbon as it passes in minute particles from the positive to the negative pole. The light is of a bluish, dazzling brilliancy, unsuitable for illumination, except when at a considerable distance from the eyes. Another great disadvantage it has is its intermittency and unsteadiness. The incandescent light is obtained by passing the current through a non-conducting medium *in vacuo*. As there is no combustion of the carbon if the

vacuum is complete, the light is not as intense as the arc, and is very suitable for general illuminating purposes.

Comparing the different forms of light with sunlight, their spectra show the following proportions :

	Red.	Green.	Blue.	Violet.
Sunlight.....	1.4	1.6	0.5	0.1
Electric.....	2.0	1.0	0.8	1.0
Paraffin.....	3.0	0.06	0.2	0.1
Gas.....	4.0	0.04	0.2	0.1

As it has been proved that the rays of greatest wave length—that is, from the red end of the spectrum—are most irritating to the retina, electric light irritates less than other forms of artificial light. The electric light gives off but very little heat, and no products of combustion, while paraffin occupies a position between it and gas in this respect. Many eyes suffer discomfort when used for a length of time with any artificial light. This is most likely to occur in eyes that are being used at near work during the day, and is simply fatigue of the ciliary muscle and the accommodation. This liability is increased where there is ametropia. This irritability to artificial light occurs where persons previously robust, and using the eyes without complaint in unfavorable circumstances, become debilitated, and then, though the general health is re-established, the irritation to artificial light remains. Many instances are recorded of the eyes being injured from exposure to excessive light. All cases so far recorded as due to the electric light have been produced by the arc, and then by gazing unprotected at it at short range. The patients are generally electricians or those working about the arc lamps. No well authenticated case of injury to the eye from the incandescent light has yet been recorded. The conjunctival symp-

toms are great congestion of the vessels, sharp pains through the globe, photophobia, lachrymation, swelling of the lids, frequently extreme chemosis of the conjunctiva, accompanied in some cases with great contraction of the pupils. These symptoms usually subside in a few days, and are probably the result of over-stimulation of the retina. In other cases actual inflammation of the retina takes place and formation of a permanent scotoma. Another drawback of the arc light as compared to the incandescent is the large amount of violet and ultra violet rays that it contains. The incandescent light possesses, therefore, many advantages over all other forms of artificial light.—*Brit. Med. Jour.*, Feb. 20, 1892.

**Gould (Geo. M.) on Artificial Eyes Inserted within a Week after Enucleation.**—The common idea is that artificial eyes should not be prescribed before three months, or even more, after enucleation. This is a great source of annoyance to the patient and his friends. Relying on the well-known tolerance of the orbit to foreign bodies, three recent cases were advised to insert the shell within a week, and a fourth on the tenth day. All have worn the shells with entire satisfaction and comfort.—*Med. News*, Dec. 12, 1891.

**Charnley (W.) on a New Artificial Eye.**—Mr. Mules, of Manchester, some years ago devised evisceration of the globe with insertion of a hollow glass globe, stitching down the opening or wound upon it. This operation was practised by many oculists when first brought out, but has been abandoned by most; and for the following reasons: (1) There was considerable, often intense, pain, and febrile reaction after the operation, sometimes lasting for days. (2) The operation sometimes failed from the stitches giving way and the glass globe dropping out. (3) Many operators were haunted by the fear of sympathetic ophthalmia. Other reasons have moved some no doubt to give the operation up. After abandoning it for some time, the writer has returned to the operation; and with less heavy and complicated dressing, is having better success. At present bichloride solution (1-5000 is employed for irrigation, and sal-alembroth, wool, and gauze for dressing. The usual aim in the Mules operation is a union of the two irregular lips of the wound. But, due to the circular opening from removal of the

cornea, there is considerable puckering. An accident to one of the author's cases, in which the central stitches gave way, while those at either end in the sclera held, leaving thus a circular opening through which the glass globe shone through as a natural cornea, has led to a final device of not suturing the central part of the wound; and of having cemented upon the anterior surface of the glass globe a disk the size of a normal cornea, painted on the under side to represent the iris and pupil.—*Birmingham Med. Rev.*, Jan., 1892.

**Kollock (C. W.) on Xerosis Conjunctiva and its Treatment.**—The disease has only been met with in Charleston, S. C., though the writer was for a year in Philadelphia, and has visited the principal eye clinics of the large European cities. In Charleston it was met with among the negro children. The eye presents a dirty white conjunctiva, darker over the visible portion when the lids are open, and generally thicker near the corneal margin. The pigment does not invade the palpebral conjunctiva. Besides discoloration and thickening the conjunctiva becomes flabby and thrown into folds with every movement of the eye. These folds are capped occasionally with silvery scales. Parents in bringing their children mention night-blindness as the cause for treatment. In no case has the disease been known to follow an ophthalmia. The ocular conjunctiva is dry and scaly and closely resembles the skin of the cavalla or pompino fish. The cornea is frequently bordered by an ulcerating ring, generally beneath the surface, though at times slightly elevated into a soft grayish ridge. The edges of the cornea are always hazy whether ulcerated or not. The centre is commonly a bluish haze from a partially opaque state of its epithelium. The eye is not painful, nor is there any photophobia. From the age of the patients (from 1 to 9 years), no subjective symptoms were obtainable. At times the eye instead of being dry is very watery, the tears having an oily tenacity, clinging to the ball. In a few slight muco-purulent discharge was noticed. The tenaciousness of the tears prevented their drainage through the tear-ducts. The majority have been among scrofulous and ill-nourished children, though in a few instances a fair physical condition was found. Dr. Koller of New York, reports having seen cases in Austria. Dr. Burns says he

has often seen the same condition in New Orleans, and thinks it a form of phlyctenular disease. The cause is obscure. Dr. Koller believes it to be due to an irritation such as sun-burn on the skin; that it occurs in epidemics, especially in orphan asylums; and that usually there is some surface of water or white wall in the immediate neighborhood, which reflects the light. The season of the year seems to have no influence. Treatment must vary somewhat with the condition of the patient. In early stages weak astringent and antiseptic collyria will answer; later with granulations and ulcerations, nitrate of silver (grs. v. to  $\frac{3}{4}$  ii.); ointment of the yellow oxide of mercury (gr. i. to 3i.); and instillations of atropine (grs. iv. to  $\frac{3}{4}$  ii.); or eserine (gr.  $\frac{1}{4}$  or  $\frac{1}{2}$  to  $\frac{3}{4}$  ii.). Constitutional treatment along with local remedies is imperative from the beginning. Some cases recover in spite of neglect. Only one case has been known to die. The pigment remains as a permanent trace of the disease.—*Therap. Gaz.*, Jan. 15, 1892.

#### Bartholow (R.) on a Few Observations on the Mydriatic Alkaloids.—

The names and sources of the principal members of this group are: *Atropine*, alkaloid of *Atropa belladonna*; salts of atropine, atropinæ sulphas, atropinæ hydrochloras, atropinæ hydrobromas, atropinæ salicylas. Atropine is a compound alkaloid of *tropein* and *tropic acid*. *Homatropine*, a synthetical product formed by combination of *tropein* with amygdalic acid. *Hyoscyamine*, alkaloid of *Hyoscyamus niger*. *Hyoscine*, alkaloid of *Hyoscyamus niger*, and also a synthetic or derivative alkaloid; salts of hyoscine—hyoscine sulphas, hyoscine salicylas, etc. *Duboisine*, alkaloid of *Duboisia myoporoides*, like the others one of Solanaceæ; salts of duboisine—duboisinæ sulphas, duboisinæ hydrochloras. *Solanine*, alkaloid of *Solanum tuberosum*, the unripe fruit. *Daturine*, alkaloid of *Datura stramonium*.

Ladenburg says daturine, duboisine, and atropine are isomeric, and in every way chemically identical with hyoscyamine; similar also in physiological action.

By combining amygdalic acid with tropein a new synthetic product results, and is known as *homatropine*. This remedy has actions corresponding to atropine, and is chemically and physically similar, but its therapeutic effect differs widely in degree, though not so much in kind. Homatro-

pine is preferred for various ophthalmic purposes, chiefly because its effects on the pupil and the accommodation are, while complete, much shorter in duration. The most important member of this group of remedies in power and range of usefulness is *hyoscine*. As a mydriatic, it equals atropine, homatropine, and duboisine, but it has power also as an hypnotic, antispasmodic, and anæsthetic. *Hyoscyamine*, the older congener of hyoscine, resembles it in all its range of action, and has had a wide reputation, but has declined in reputation owing to the greater certainty and power of hyoscine. In asylum treatment, hyoscine has largely supplanted morphine for acute mania, the violence of acute melancholia, and of general paresis, and as a general hypnotic. It is remarkable for the absence of unpleasant after-effects. Its dosage is also much more uniform than hyoscyamine. Of the latter the dose is from  $\frac{1}{100}$  to  $\frac{1}{10}$  of a grain, while of hyoscine it is from  $\frac{1}{100}$  to  $\frac{1}{10}$  of a grain. Both act well from hypodermic use; not more than two doses in a day should be required. The writer's preference in selecting one of these remedies would be: for eye operations and refractive work, homatropine; for the treatment of eye inflammations, atropine.—*Med. News*, Dec. 12, 1891.

**Duret (H.) on Monocular Diplopia as a Cerebral Symptom.**—Monocular diplopia is a symptom not unknown to oculists. It is the result in many cases of dynamic or physical trouble in the media of the eye. An abnormal opening in the iris, creating a second pupil, as from congenital defect, or from some pathological process, can cause this phenomenon. When this occurs in a single eye, without any appreciable disturbance of the media, oculists attribute it to cerebral origin. Recently, James Adams reported a case at the Society of Ophthalmology in London, in 1888. At the same meeting, Ord and Nettleship reported three cases. In 1885, Fontan, of Brest, reported a very carefully studied case to the French Society. Finally, R. Tilly, of Chicago, published a short study in the *American Journal* of 1888; and in the review of Galezowski for 1889 is an observation by Dr. Brunswig, of Havre. The *Archives of Neurology* of last year also contain an interesting observation, briefly reported, of a patient attacked with diffuse meningo-encephalitis. In all these cases no sufficient alteration in the

media could be found; the trouble was attributed to a cerebral disturbance, and sometimes the lesion was verified by an autopsy.

This small number of observations demonstrates that monocular diplopia of cerebral origin has rarely been noted and studied with any detail. The following is a new case: A machinist, fifty years old, while tending a large tool machine, bent to look under it, when a heavy piece of sheet-iron fell and pressed his head against the stanchions of the machine, crushing and cutting the ear. He fell unconscious. Three hours later, when examined, consciousness was returning, but speech was embarrassed. He could, by supporting himself, drag himself about. There was slight paresis of sensation and motion on the right side. He only complains of intense headache. There was an abundant hemorrhage from the nose, but not from the ears. There is a large ecchymosis of the left upper eyelid. Behind the two ears, over the temporal regions, are large bosses of subcutaneous hemorrhage, produced by the pressure. The day following, the commotion diminishes, leaving only the intense headache. Five or six days after, on sitting up, he first notices diplopia, with vision weaker. Examination proves the diplopia to exist only in the right eye,

and in certain positions. Examined further by Dr. Dujardin, shows a peculiar position of the head, lowered and inclined to the right. The ophthalmoscope shows a slight pallor of the nerve; the media and lens normal. Visual acuity, according to the patient, much diminished  $V = \frac{1}{2}$ , no glass. He recognizes all colors, but says that they are less vivid than with the other eye. The perimeter demonstrates a decided reduction in the visual field. The diplopia of the right eye is very clear. He counts fingers double. The second image is a little less distinct than the real image, and it is situated some centimetres to the left of it. The diplopia is constant in all directions which he looks save when he takes the position mentioned above,—holding the head down, and inclined to the right. Visual acuity of the left eye is subnormal, but not so marked, being  $\frac{1}{2}$ , and without improvement by glasses. The papilla is pale, and the nerve seems to be undergoing commencing atrophy. Examinations were repeatedly made. The diplopia remained for about two months, slowly disappearing along with the headache. But still longer there remained intellectual torpor, and decided fatigue at work.—*Four. des Sciences Méd. de Lille*, Jan. 8, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

### Wilson (H. A.) on the Aseptic Closure of Long-Standing Sinuses Having their Origin in Tubercular Joints.

—It is recommended to inject the sinus with a solution of pyoktanin, or some other innocuous coloring matter, for the purpose of staining its walls and rendering the excision by the knife more easy and certain. The laceration of the tissues by tearing, as a result of the use of an ecraseur or dry dissector or handle of a knife, tends to sloughing, and should be avoided. Diseased bone is removed by the chisel in preference to scraping, for the same reason. Drainage tubes are not used, sutures are frequently subcutaneous only, and the skin wound closed by collodion and gauze.

If all diseased tissue is removed primary union results, and often, too, where all diseased tissue does not appear to have been removed. The repetition of the

operation in relapsed cases where the seat of disease has not been reached is a less objection than the continuous discharge of pus.—*Atlanta Med. and Surg. Four.*, January, 1892.

### Carroll (T.) on the Etiology and Treatment of Congenital Equinovarus.

—As to the etiology, the writer favors the theory of inter-uterine paresis, and deals a blow at the retarded-development theory in mentioning the fœtuses of two abortions between the third and fourth months in which the feet were normal, showing no trace of club-foot.

Only the non-operative early treatment is discussed. A modified form of that which is known as Barwell's is used; the modification being in a brace arrangement from the pelvis to the garter line with joints at knee and hip. This cannot slip downward nor can it turn about the limb. To

the band of this brace at the garter line the elastic cords are attached which represent the elongated muscles as in the Barwell arrangement. The foot attachments are either adhesive plaster or a laced shoe. *Cincinnati Lancet-Clinic*, January 30, 1892.

**Phelps (A. M.) on Operation for Talipes Varo-Equinus.**—The paper is an amplification of remarks made at the performance of an operation upon two patients before the Medical Society of Virginia on October 7, 1891. The details are the same as have been already been noted in these columns. The statistics of the operation are brought down to date, the author having operated 161 times and others 181 times, making in all 342 operations with "good results."—*Va. Med. Monthly*, February, 1892.

**Phelps (A. M.) on Congenital Dislocation of the Hip.**—Two cases are referred to in which the dislocation was upward and forward. In one a post-mortem examination was made and the specimen obtained is shown in illustration. The acetabulum was found to be angular in shape, small

and undeveloped, and contained the remains of the ligamentum teres. The head of the femur rested above the rim of the acetabulum, and the upper and anterior border of the acetabulum is changed from convex to concave. It is believed that congenital dislocation at the hip is produced by injury at birth; injury *in utero*, or disease *in utero*; rachitis; hereditary influences, and in exceptional cases, if such there are, by arrest of development of the acetabulum.—*Boston Med. and Surg. Jour.*, January 28, 1892.

**McKenzie (B. E.) on Roto-Lateral Curvature of the Spine.**—In those cases where the deformity can be temporarily corrected by posture, postural exercises alone are advised in the way of treatment; in those where the deformity can be partially corrected, exercises are advised, with or without support as there may or may not be weakness; in the severer cases supports are advised, and the plaster jacket, leather corset, and wood corset are advised.—*Canadian Practitioner*, Feby. 1, 1892.

## REPORT ON THERAPEUTICS.

**Wood (H. C.) on the Ordinary Water-Bed as a Means of Affecting the Temperature of the Body.**—I have for some years used the water-bed as a means of heating the human body during collapse, with such extraordinarily good results that I venture to call the attention of the profession to it, without claiming that no one else has done the same thing.

In cases of collapse and subnormal temperature occurring during advanced stages of typhoid fever, the severe forms of bronchitis, etc., etc., I have been accustomed to employ an india-rubber water-bed, and half the width of the ordinary mattress. It is placed upon the bed, alongside of the patient, partially filled with water at a temperature of 140° to 150° F., and covered with blankets, upon which the patient is laid. The weight of the body carries it down and forces the water up at the sides, so that the person is partially surrounded by the heated water. The mass of the water, and the protection of the blankets, prevent the loss of heat, so that the mattress keeps hot for many hours. Within a few days I have had an example of the power of the hot-water mattress. The patient, in the early part of

the fourth week of typhoid, went into a collapse, with subnormal temperature and profuse sweating. At the time when the water-bed was put on his mattress his temperature was 97° F. There was some delay in getting the hot water; probably three-quarters of an hour elapsed before the man was put on the bed, and his temperature had fallen to 95.2° F. Within twenty minutes the temperature had gone up to 97.5° F., and afterward was normal. When the heat of the body has reached 98.5° F., the patient may be lifted off and laid alongside of the water-bed, which being covered by the same blankets as are over him will keep the temperature up to the normal.

The success which I have had in heating the body with the contrivance suggests that the water-bed may also be used instead of the cold bath for reducing temperature. All that would be necessary would be to have the water-bed supplied with two nozzles, instead of the ordinary aperture, and an india-rubber tubing or hose fastened to each nozzle, connecting the one with the spigot, the other with the outlet of the neighboring bath-tub or stationary washstand. In this way, without labor or

trouble, water of a constant temperature of 40° to 50° F., at least in winter, could be kept in the bed, and it would be very easy to run the water through ice if it were necessary to get further lowering of the temperature.—*Univ. Med. Mag.*, Mar., 1892.

**Abbott (G. E.) on an Obstetrical Bundle.**—This bundle I have found very useful. I have such a bundle prepared for every obstetric case, and its cost, seventy-five cents, is more than made up by the saving of time and subsequent visits. It contains the following :

1. One square yard of rubber cloth to be placed under the patient's hips and thighs—rubber side up, of course.

2. One square yard of canton flannel to be placed on top of the rubber, between it and the patient's body. In this way I make sure of having the bed protected and kept clean, and an aseptic environment, and the rubber can be quickly arranged to carry off the fluids into a suitable receptacle in case of operative procedures.

3. A number of pieces of cheese cloth to use as small towels, and also, when dampened with bichloride solution, as pads for the vulva.

4. A new and clean nail brush for each case. These brushes cost three cents, and hence one can afford a new one each time.

5. Safety pins.

6. A narrow bobbin, consisting of three strands, for ligating the umbilical cord.

7. An obstetrical eye bandage. This consists of a strip of cheese cloth, the two edges of which are rolled in and then doubled over a second time. While waiting for the pulsations of the cord to cease I wipe out the baby's eyes, and wrap this bandage around the head and eyes, and pin it. When this is not done the child often rubs its dirty fingers into the eyes before the attendants have had time to wash the child. Since I have adopted this plan I have never had any cases of ophthalmia neonatorum.

8. A small wooden vial containing tablets of bichloride of mercury. I prefer these small ones to the larger size, as they are just sufficient for each dressing without splitting the tablet.—*Post-Graduate*, Mar., 1892.

**Jones (H. L.) on an Improved Instrument for the Electrolysis of Nævi.**—It consists of a handle into which two, three, four, or five needles can be

screwed, and it is so made that the alternate needles are attached to the opposite poles of the battery. Thus, if needles 1, 3, and 5 are positive, the needles 2 and 4 are negative, or *vice versa*. The advantages of the instrument are as follows :

1. The manipulations are much easier than when a number of separate needles are used ; it is not at all easy to manage six or seven separate needles, for those which are negative usually have a great tendency to slip out of the nævus.

2. By varying the number of needles the instrument can be adapted to the size of the nævus.

3. The needles cannot accidentally touch one another during the operation. This is an important point, because any contacts between needles of opposite pole cause shocks.

4. The needles remain equidistant throughout their length ; the density of current therefore is uniform all over their surfaces, and the amount of destruction of tissue is everywhere uniform. It is much more difficult to secure this desirable result if the needles are irregularly arranged. When that is the case the tissue is very likely to slough in some parts, while it remains unaffected in others.

5. The current is practically limited to the area enclosed between the outer needles. No indifferent electrode in the form of a pad is required, and there is no risk of bad effects from the passage of the current through the rest of the body. In nævus of the head untoward results have followed from the current traversing the brain in passing between the electrodes.

It is useful to have a stock of needles insulated to different lengths. The bare part should be long for large nævi, and short for small ones. Either steel or platinum may be used ; the former rapidly corrodes, and often needs renewal, but steel needles are more easy to introduce into subcutaneous nævi. It requires a considerable degree of force to push all five needles through the skin at once. The current used should be varied to suit the length of surface of needle in contact with the tissues. If the required degree of electrolysis can be produced by 40 milliamperes when two needles are used, then 80 milliamperes would be wanted to secure the same current density with four needles.—*British Med. Jour.*, Feb. 20, 1892.

**Freeborn (G. C.) on a Machine for the Rapid Separation of Deposits from Fluids.**—At a recent meeting of the New York Pathological Society, the writer stated that at the last meeting of the Congress of Internal Medicine, held at Wiesbaden last April, Dr. Littman, of Berlin, had presented a centrifugal machine adapted for the rapid separation of deposits from fluids for the purpose of microscopical examination. In the machine presented at that time a speed of nine thousand revolutions per minute could be obtained. Dr. Freeborn said that he desired to present to the society a home-made machine of this description, which, although capable of only about nine hundred and fifty revolutions per minute, had answered admirably the purposes for which it was devised. He had taken the necessary gearing from an ordinary rotary drill, and this, combined with a table clamp and a disk of sheet brass attached to the end of the spindle, were all the essential parts. To the periphery of the disk of brass a number of wire gauze cylinders are pivoted, so as to hang vertically when the machine was at rest, but when the machine was in rapid motion, they would be thrown outward, just as are the balls of an ordinary steam-engine governor. The fluids from which the sediments are to be collected are contained in small glass tubes, conical at the bottom. These tubes are introduced into the gauze cylinders, and the disk is then revolved rapidly. In this way, the sediment is thrown to the bottom of the collecting tubes, and may then be removed from them by means of a long and very slender capillary pipette. In some of Dr. Littman's experiments with urine it was found that by twirling the tube for four minutes, then decanting the urine into another tube, and repeating the process twice, the urine could be rendered absolutely free from sediment. Crystals could of course be very readily collected in this way, and enough casts for diagnostic purposes could be obtained in five minutes with this machine.

In order to demonstrate the action of his machine, Dr. Freeborn employed three different mixtures; one of lime-water holding in suspension very finely divided carbonate of lime, another of blood mixed with normal salt solution, and the third containing water and carmine. Putting

the machine into action for about half a minute was sufficient to show an appreciable quantity of sediment at the bottom of the tubes. In ordinary urinary analysis, not only would this new method enable the microscopical examination to be made about twenty-four hours sooner than formerly, but it would effectually prevent the decomposition of casts which was liable to occur when the urine had to stand for many hours in order that the deposit might settle.—*N. Y. Med. Record*, Feb. 27, 1892.

**Lancaster (T. M.) on the Preservation of Hypodermic-Syringe Needles.**

—Having noticed in various medical journals different plans of preserving hypodermic needles from rust, or at least from occlusion, I have thought that a means that has been in use by myself for the last twelve or fifteen months might be of use to the profession generally. Accidentally I found that, if the needle head was filled with unguentum petrolei and then screwed on to the barrel, the needle would be filled with the ointment and perfectly preserved for an unlimited time. All that is necessary to do when you want to use the needle is to fill the barrel with water and force out the contents of the needle, or, in case you should forget to do so, or are in a hurry, you may disregard the needle-filling and proceed with the injection, as no harm can come from the subcutaneous injection of so small an amount of ointment. I have used this method of preservation for small and large needles, have no use for the little brass plungers that accompany the needle, and have saved a great deal of time, possibly two or three lives, and quite a considerable amount of bad humor. If some one would construct a small bottle with a screw cap to which a small spoon was attached for filling the needle-head, to accompany hypodermic syringes, the outfit would be complete.—*N. Y. Med. Jour.*, March 19, 1892.

**Fletcher (S. W.) on a Possible Source of Error in Using the Fever Thermometer.**

—About two months ago, after having my fever thermometer, a Hicks, seven minutes in the axilla of a man sitting in his chair, the bulb well up in the axilla, the stem down, I found the temperature indicated, 110.2° F. A second trial gave 109.4° F. Not believing the temperature to be so high, and examining the index carefully, I found that it had left the point



where the mercury separates in the stem, and would run from the bulb or towards it just as it was placed higher or lower than the stem. Since that time I have had four similar experiences, and now if the temperature indicated is 104° F., or more, I do not feel sure that it is correct unless I find the mercury in the stem touching the point where it usually separates. How general this fault is with thermometers whose indexes are formed of a long column of mercury, or otherwise, I cannot say.—*Bost. Med. and Surg. Jour.*, Mar. 24, 1892.

**Barrs (A. G.) on the Use of Digitalis in Aortic Disease.**—I will state my conclusions in the following propositions:

1. In all cases of valvular disease the chief desideratum in regard to the heart itself is the condition of the cardiac chambers in respect to dilatation and hypertrophy.

2. That the presence of symptoms in cardiac disease means always failure of compensation.

3. That the condition described as over-hypertrophy or over-compensation does not exist.

4. That the dangers in aortic disease arise from the same cause as the dangers in mitral disease, namely, failure of the compensation, that is, failure of the ventricular muscle to overcome the ever-increasing work put upon it.

5. That if digitalis is safe and beneficial in mitral disease, it is equally so in aortic disease.—*British Med. Jour.*, Mar. 12, 1892.

**Chenery (E.) on Infusion of Triticum Comp.**—This term I would apply as a proper professional name to the advertised "Garfield Tea." This popular laxative and diuretic, composed of the simplest herbs, as a proprietary medicine, makes these herbs altogether too expensive for poor people. I therefore suggest the term above, and present the formula for it as follows:

B—*Sennæ folii.*

*Tritici repens*..... 3̄ 25 parts.

*Balmonia*..... 1 part.

M.—One to two heaping teaspoonfuls to a cup of water, steeped as common tea should be steeped, viz.: Put in tin dish and pour the water on absolutely boiling hot; stir and steep three minutes and no longer. This extracts the virtue and leaves the bad taste and griping elements of the senna behind. Drink this as hot as possible on retiring at night. There is no griping about it, and the light stimulation of the kidneys is more agreeable than otherwise.

This taken in greater or less quantities every night for a time will work wonders for those who need the laxative. As for the diuretic qualities, they are as much needed as were the diuretic qualities of the waters of a certain spring near a girl's seminary. The seminary was advertised over the advantages the young ladies might receive from those diuretic waters, as though all girls needed them.

Any apothecary can prepare and keep on hand such mixtures of herbs, using better senna than that found in the proprietary Garfield tea. This makes a very convenient mixture for every family to keep on hand for family use, and offers a proper prescription for the physician.—*Times and Register*, March 19, 1892.

**Cortis (W. R.) on Accidental Poisoning by Sulphate of Atropia Treated by Subcutaneous Injections of Pilocarpine.**—Dinds, aged eighteen months, was brought to my house at 11:30 A.M. on January 31, his mother stating that the child had drank from a two-ounce bottle containing a solution of four grains of atropia sulph. and six grains of cocaine, at about 10:15 A.M.

The child was unconscious; could not be roused; pupils widely dilated; pulse slow and feeble. The parents live at Mossman's Bay, and the mother stated that on the journey in, the child had been convulsed, and had screamed violently at times.

I used the stomach pump, washing out the stomach with warm water several times. When this was completed the child seemed still more collapsed, and I did not think it would live an hour.

At a quarter past 12 I injected subcutaneously one-seventh of a grain of pilocarpine. At 12:30 the pulse had improved, and the pupils did not appear to be so fully dilated. At 1:45 P.M. the dose of pilocarpine was repeated, and a little whiskey and water given.

After this the child began to improve. At 4 P.M. it tried to drink a little milk; did not appear to see distinctly. At 10 P.M. it was very lively and excitable. It slept little during the night, and tried to vomit occasionally; but in the morning, excepting it was very weak, it appeared to have recovered.—*Australasian Med. Gazette*, Feb. 15, 1892.

**Heaton (C.) on the Use of Jaborandi for Urticaria.**—I have noticed in some of my medical journals of recent date

various remedies recommended for the cure of urticaria. I have not, for the past ten years, used any other remedy than jaborandi for this affection. I give one-half teaspoonful of the fluid extract every half hour until four doses are taken, or until free perspiration or salivation is induced. I usually direct it to be given in the evening, and instruct the patient to avoid exposure to cold while taking it, and for thirty-six hours afterward. If necessary, repeat in same way in twenty-four hours. I have in no case had to repeat doses more than once to effect a cure.

I have also found jaborandi given in the same way a most excellent remedy in gonorrhoeal rheumatism, when given in the beginning.—*Cincin. Lan-Clin.*, Dec. 19, 1891.

**Mann (F. W.) Salicylic Intoxication.**—J. K.—, a German laboring man, consulted me for an attack of subacute rheumatism. I proscribed a mixture containing two drachms of salicylate of soda in four ounces of peppermint water. Of this mixture the patient was instructed to take a teaspoonful every two hours. In accordance, however, with a belief somewhat prevalent among the Germans, that the more rapidly the remedy is taken the more speedily is the cure effected, the patient proceeded in the course of four hours to empty the entire contents of the vial. As a result of this excessive dose the patient became rapidly hallucinated, manifesting delusions of persecution. During the evening of this day he became so unmanageable that his friends, unable longer to control him, sought aid from the police, the outcome of this being that the patient was incarcerated in a cell for the night. The next morning the patient again came under my observation, and the relatives and police, believing the man insane, questioned the wisdom of confiding him to a physician, and suggested the asylum. In obtaining the history, the ingestion of the excessive dose of the medicine came to notice and the diagnosis of salicylic intoxication was made. The patient was, therefore, allowed to be removed to a hospital. During the next four days the patient manifested all the phenomena of delirium tremens. Visual and auditory hallucinations possessed him. After this he had to be forcibly restrained, and was, therefore, confined to his bed. His attention was incessantly concentrated upon freeing him-

self from the restraints which had been imposed upon him. When spoken to he responded pleasantly. He was neither coarse in speech nor action; his violence arose solely from the desire to elude his persecutors. His pulse was 130; his respiration was not visibly depressed. At the end of the fifth day the hallucinations gradually waned and disappeared, and the patient rapidly recovered his normal state of health. All trace of rheumatism had disappeared.

Salicylic acid poisoning is said to be most effectively treated by diuretics. The excretion by the kidney of salicylic acid in the form of salicyluric acid and salicin is the natural safeguard in excessive administration. The occasional occurrence of such cases as the one now recorded lends emphasis to German Sée's injunction that salicylic acid should never be administered without a diuretic as an adjuvant.—*N. Y. Med. Record*, Feb. 13, 1892.

**Shallenberger (H. M.) on Physostigma in Hiccough.**—In a recent issue of the *Edinburgh Medical Journal* Mr. Smart calls attention to a case of obstinate hiccough from chronic alcoholism, so persistent as to prevent sleep and the ingestion of food. No relief followed the use of any drugs, except after the administration of dangerously large doses of morphia persisted in for six days. My object in this note is to assure the profession of the value of physostigma in these cases of obstinate hiccough, from whatever cause. The cases that I have seen have yielded to its influence within two or three days. The last case was precisely like the one reported by Mr. Smart, and forty-eight hours' use of this drug settled the hiccough. Another case of hysterical hiccough, of three months' duration, that had resisted all other agents, was speedily controlled in the same way. A good fluid extract was the form given. The dose is four to eight drops every two or three hours, pushed to the point of causing toxic symptoms.—*N. Y. Med. Record*, Feb. 13, 1892.

**Wessinger (J. A.) on Cocaine Poisoning.**—The patient is a young man who for some time past had been suffering from rectal ulcer with colitis accompanied with quite intense tenesmus, for the relief of which latter he had resorted to cocaine. On the afternoon of February 4th, upon his own responsibility, he took a supposi-

tory containing rather more than three grains of the drug. I saw him about an hour after and found his condition as follows: Pulse 150, thready; respiration 5 to the minute and simulating the Cheyne-Stokes variety; pupils dilated; bilateral sweating; surface cold, patient conscious, and responding well to questions; vision good; no pain; no nausea; surface anæmic. I ordered twenty drops of tincture of digitalis with  $\frac{1}{10}$  of a grain of atropine sulphate hypodermically, to be repeated in twenty minutes; hot applications to the surface and brandy internally. Half an hour after the second hypodermic the patient's pulse had fallen to 120; the respirations had increased to 12 and were regular; and the surface was becoming warm and somewhat flushed. I then put him upon digitalis and strophanthus, three drops of each, internally, and omitted the atropine.

At midnight his pulse had reached 100, and the respirations were normal. From this time he rapidly recovered.

In two cases elsewhere reported I obtained similar results from the treatment pursued in this case. While digitalis, or any of the other cardiac tonics, is strongly indicated in these cases, there might be a question about the atropine, since the action upon the pupil of both cocaine and atropine is mydriatic, and this would indicate that the two agents are synergists. Yet cocaine paralyzes respiration, while atropine stimulates the respiratory function. Here, it would seem, is the chief indication for atropine to overcome the toxic action of cocaine. While this is true, yet it must not be forgotten that atropine also stimulates all the vaso-motor ganglia, and, if carried beyond a certain limit, would overcome the cardiac inhibition obtained by the digitalis—an important factor in eliminating the cocaine poison.—*N. Y. Med. Jour.*, March 20, 1892.

**Myers (O. M.) on the Physiological and Therapeutic Action of Somnal.**—As the result of a series of experiments upon animals, Myers offers the following conclusions:

1. Locally, somnal is non-irritant, exerting rather a stimulating effect upon the mucous membrane of the stomach. When applied directly to the heart of the frog, it acts as a powerful poison, destroying its electro-excitability.

2. In therapeutic doses the drug exerts no appreciable physiological effect upon the heart, and may be regarded as safe. Toxic doses depress that viscus: *a*, by direct action upon the muscle-fibre; *b*, by stimulation of the cardio-inhibitory centres.

3. Therapeutic doses have little or no effect upon the pulse-rate. A slight primary rise in the arterial tension may be observed, which soon returns to normal, or may even fall below—the latter probably due to muscular relaxation during sleep. Toxic doses rapidly diminish pulse-rate and pressure; probably due to direct action upon ganglionic heart-centres.

4. Ordinary doses cause the respiration to become slow and full. Toxic amounts induce rapid, shallow, and irregular respiration; the result of depression of the respiratory centre at the base of brain.

5. As in therapeutic doses sleep is induced without perceptibly affecting any other portion of the economy, it is fair to conclude that somnal acts directly and primarily upon the cerebrum.

**Therapeutics.**—The indication most promptly and perfectly met by somnal is to induce sleep, and it may be confidently relied upon by the prescriber in all cases where the insomnia is not the result of pain or syphilitic disease. As the nervous element predominates, somnal is the more certain to fulfil the requirements; as, for example, insomnia due to functional over-excitement of the brain after mental strain or anxiety, sleeplessness of delirium tremens, and in maniacal and hysterical disturbances. Its sedative and somniferent action is strikingly efficacious in the insomnia occurring during convalescence from acute disease. Where an adynamic condition exists, it must, of course, be used with caution. In whooping-cough, spasmodic laryngitis, asthma, "nervous cough," and chorea, it possesses decided sedative properties. A great element of safety is that the action of somnal, so far as I have observed, is never out of proportion to the amount ingested, nor does it act in a cumulative or other unexpected manner. The drug appears to possess little or no influence over insomnia due to acute inflammatory conditions.—*N. Y. Med. Record*, March 12, 1892.

**Flick (L. F.) on Iodoform Inunctions in Phthisis.**—The writer gives condensed histories of fifteen cases of pul-

monary phthisis with the results in each case. He believes that iodoform will cure tuberculosis in the first stage, and it acts better when administered by inunctions than when given by the mouth. When the disease has advanced to the second or third stage iodoform may do good, but can no longer be depended upon as a curative agent. Creosote should then be given with iodoform, and given in large doses. If given diluted with hot water, as much as fifteen drops can be taken with comfort. It seems, indeed, that creosote is the drug to be relied upon in the second and third stages of the disease. The author, however, uses the iodoform inunctions in this stage, for the reason that the tuberculous nodules in a given case do not all break down at the same time, and that while some nodules may be broken down, or have already broken down, there may be many that are still in the first stage.

Along with specific treatment he always uses tonics and forced nutrition. Much of the success that may be ascribed to specific treatment may of course be due to the tonic and nutrient treatment, but he is bound to say that his results with iodoform inunctions and creosote, together with tonic and nutrient treatment, are much better than they were before he used the inunctions.—*Phil. Med. News*, March 12, 1892.

**Wood (J.) on Camphoric Acid for the Night-Sweats of Pulmonary Tuberculosis.**—Probably there is nothing so unpleasant or aggravating in tuberculous patients as the profuse sweating that occurs either in the morning or during the entire night. The depression following it does not seem to be due to the sweating itself, but rather to the effects of a gradual increase in the quantity of carbonic acid gas in the blood, incident to the difficult interchange of gases in consequence of the pulmonary affection. It is well known that in normal respiration the blood does not contain so continuously a high percentage of carbonic acid gas as will cause a less sensitive condition of the centres governing respiration. But in pulmonary tuberculosis, when the energy used in the daily exertions, from excessive coughing or other physical causes, more than exceeds the supply of energy and nutrition that can be furnished by the body, the respiratory centres are greatly depressed, and are not stimulated so

quickly by a percentage of carbonic acid gas that normally would affect those centres. The centres presiding over the functions of the sweat-glands, not being affected by the physical causes, respond to the increased stimulation, and pour forth their secretion abundantly. The proper therapeutic mode of combating this functional perversion would seem to be to use such a drug as shall stimulate the respiratory centres, and thereby cause the elimination from the blood of more carbonic acid gas, and in this indirect manner act as an anhidrotic.

Camphoric acid seems to effect this object with less derangement and more satisfactory and lasting results than any other drug. This remedy is best given in doses of twenty grains from four to six hours before the period of sweating is expected. The best method of administration is dry on the tongue, and washed down with a little water. The taste of the drug is not unpleasant; neither does it produce the gastric irritation so frequently experienced with many medicinal agents used under like conditions.

Cases are given in detail illustrative of the effects of the remedy.—*Phil. Med. News*, March 12, 1892.

**Robinson (B.) on Creosote in Phthisis.**—In a new communication on this subject the writer reaffirms the convictions expressed by him in previous papers as to the great value of this remedy. He finds that it relieves cough, lessens expectoration, improves nutrition, and lessens the number of bacilli even to extinction. The physical signs show evidences of a lessened area of damaged pulmonary tissue, and even the occlusion of small cavities.

What are the drawbacks? what the contra-indications in the use of creosote? Does it ever work harmful results? The objections to the use of creosote are few; and if any occur, they are usually obviated by a little judgment and good sense. Occasionally the stomach becomes intolerant. This is shown either by headache, inappetence, and a sluggish feeling in the performance of usual duties; or there is slight pain or uneasiness in the region of the stomach, evidently brought on by the action of creosote. These ill-effects are frequently occasioned by a too rapid increase of the dose, by a faulty method of administration, or by some evident personal

idiosyncrasy; or, indeed, the true explanation is simply that there is an irritative or weak stomachal condition connected with the presence of tubercular deposit in the lungs, and dependent on catarrhal gastritis, or a possible atrophy of the gastric tubules. The remedy of this state is not far to seek. Diminish the dose of the remedy for a time, or in extreme cases interrupt its use for a while, and resume prescribing it in small and slowly increasing doses, and more frequently repeated, only after a period of complete rest from taking it. If diarrhœa be occasioned by its use, the same rules apply, or, indeed, an appropriate opiate may be added in small amount to each dose with good effect, so far as toleration is concerned.

In regard to the alleged effect of creosote on the kidneys, Robinson expresses himself as follows:

Usually the ordinary tests for creosote do not show its presence in the urine. It has been found there, however, and it is therefore conceivable that it may irritate the kidneys at times in a pronounced manner. I do not believe, after careful watching, that this will often take place, unless large and frequent doses of the drug be given. It is true that under these circumstances I have recognized a passing albuminuria, which disappeared when the amount of creosote taken by the patient was diminished. I think it is wisdom, in view of such facts, to be on one's guard and to examine the urine carefully every few days, at least, when the patient is taking large amounts of creosote.

Is it a contra-indication to the use of creosote when renal disease already exists? In reply, I would say that under these circumstances I have given creosote and have observed no ill effects from its use, although it is true I have not been willing to increase the dose beyond six or eight minims in the twenty-four hours. In so doing I believe I have acted prudently and wisely.

In regard to hæmoptysis, is there any reason to believe that the use of creosote occasions hæmoptysis, or makes patients more liable to it? According to Dujardin-Beaumetz, creosote in appreciable doses, while it is eliminated from the body by way of the respiratory organs, congests the bronchial mucous membrane, and thus promotes the occurrence of pulmonary hemorrhage. According to him, the drug is strongly contra-indicated whenever

hemorrhage actually occurs. Nothing in my experience thus far tends to corroborate this view. It seems to me prudent, however, to recognize the possibility of what Beaumetz affirms, and for this reason to interrupt the use of creosote during the time there is hæmoptysis, or an evidently imminent tendency to it.—*N. Y. Med. Record*, Feb. 27, 1892.

**Schneller (M.) on Guaiacol in Tuberculosis.**—Guaiacol is now given in liquid form, the pills having been almost entirely abandoned. In pulmonary tuberculosis S. gives children 2 to 3 drops, adults 3 to 5 drops of pure guaiacol, four times daily, stirred in a glass of salt water, milk, bouillon, and for adults also in wine, etc. He also considers it less practical to dispense the remedy in capsules than by the aforementioned simple method. If necessary to take in capsules, he recommends that the patient drink some liquid, about an ordinary tumblerful, immediately before and after taking. If administered as previously described he found that his patient took guaiacol regularly, for many months, to a year and a half, without untoward effect. He directs his patients (pulmonary tuberculosis) where necessary to occasionally take expectorants, digitalis, and antipyretics with the guaiacol, the use of which latter must never be interrupted. These adjuncts are especially necessary when commencing the treatment, as only after continued use of guaiacol it indirectly acts favorably by reducing the fever. In many instances he administers by inhalation, employing weak aqueous guaiacol solutions (5:3000 up to 5:5000), or turpentine with camphor, etc. These inhalations must be constantly controlled by the physician, and over-exertion in inhaling must be strictly avoided.—*Notes on New Remedies*, Feb., 1892.

**Blair (E. S.) on Hay Asthma.**—The writer extols the use of *euphorbia pilulifera* as an excellent remedy. He reports the case of a child aged ten years who had been a great sufferer from this affection. Iodide of potash and *grindelia robusta* gave partial relief through the day but not at night. The treatment was then changed to the fluid extract of *euphorbia* (dose not given). The benefit obtained was prompt and decided. After taking the prescribed dose three times a day for a few days, the patient was allowed to omit it, and would go for days or a week without

the symptoms returning. Upon showing themselves again a return to the medicine had the same happy effect as before. A four-ounce bottle of the fluid extract of euphorbia was given her, and the mother reports that the child has increased in flesh and strength, and spent the best winter of her life this winter. She reports having used the medicine in her family in all coughs and colds. It remains to be seen whether this remedy has produced any radical and permanent change in the system, such as to render it capable of resisting the influence which annually leads to hay asthma.—*Therap. Gazette*, March 15, 1892.

**Warner (J. P.) on Ice-Cream in Gastric Ulcer.**—Miss M—, aged thirty-eight, came under my care about two years ago, suffering with intense pain in stomach after eating, and with severe vomiting spells. These things she had suffered with for about two years off and on, and had been treated by others until her family physician said that he could do no more for her.

An examination over the stomach showed a thickening and hardness in nodules about the pylorus, and on consultation with Dr. C., it was decided that the trouble was probably a schirrus condition of the pyloric orifice, and prognosis bad. After treatment with all known remedies, and food prescribed by enemas per rectum, and pain and vomiting not relieved but increasing, the family were told that patient could not live but a short time.

Finally, as the hunger was intense and bowels rejecting the food, the writer suggested their trying a little ice-cream, which was done. The first given was retained on stomach with no increase of the pain. This, then, became the only article of diet, and patient gradually increased the quantity of it until she took as high as three and four quarts during the twenty-four hours. This was the only article of food for fifteen months, patient gradually improving until now; the thickening and hardening have all disappeared, and she can now take other plain articles of food as bread, vegetables, meats, etc. When the diet of ice-cream was begun, patient was cadaverous, emaciated, and confined to bed. Now she is plump, strong, doing a good deal of work, and gained about thirty pounds. The ice-cream was made at her own home, of good, fresh, unskimmed milk, each day's allow-

ance containing from six to eight eggs, very little sugar, and flavored with anything to suite her taste, as vanilla, lemon, bananas, peaches, and different kinds of berries, etc.

The galvanic current was used in the meantime over pylorus twice a week. Any extra distress from over-fatigue or over-acidity of stomach, as would occasionally occur, was relieved by the stomach tube, working it out the stomach with hot water.—*N. Y. Med. Times*, Jan., 1892.

**McCasey (J. H.) on Cyst of Peritoneum Resulting from Impacted Gall-Stones; Autopsy.**—Miss R. S., fifty years old, a housemaid, presented a history of ague in childhood. Between the ages of seven and twelve years she had occasional attacks of jaundice. At sixteen she had an attack of typhoid fever lasting three weeks. As long as she can remember she has had pain in the right hypochondrium, so that "she could scarcely drag her right foot." Vomiting occurred with great readiness. She suffered with decided distension of the abdomen. Her life had been an active one, and she had been exposed to many hardships and privations.

Called to see her in June, 1890, I found the temperature 103°, the pulse 106, the abdomen tympanitic and extremely tender. I then diagnosed peritonitis, expressing a suspicion of the existence of an abdominal tumor, but owing to the tenderness I could not make the examination conclusive. The patient was confined to bed for about three weeks, but recovered without further mishap.

On June 26, 1891, I was again called to the patient. The temperature was 102°, the pulse increased in frequency. She was suffering with severe dragging pain in the right hypochondrium and freely vomited bilious matter. The abdomen was distended, and there was perceptible bulging, with flatness on percussion, just below the liver. I told the patient that there was likely a cystic tumor, and that I would return in a few days to aspirate and remove the fluid.

On July 1st, I withdrew about two quarts of dense, blackish fluid.

About July 17th, I withdrew about three fourths of a bucketful of the same kind of fluid mixed with pus. About a week later, I again applied the aspirator, but failed to obtain any fluid. On August 11th, I succeeded in obtaining about three fourths

of a bucketful of pus. On August 16th, I introduced a trocar and cannula, and permitted the cannula to remain for five days, a continuous discharge of pus taking place. The woman died on August 27th.

At the autopsy, twelve hours after death, on opening the abdominal cavity in the mesial line, the peritoneum was found black and discolored. The gall-bladder was of medium size, and was filled with gall-stones—seven or eight in number, some as large as marbles. The small ones occupied the cystic duct. The liver was somewhat enlarged, but was otherwise quite healthy. Below the liver was a large cystic tumor, having a capacity of a gallon or more. Its inner walls were calcified. The sac was greatly thinned at several places. At the lower and posterior aspect a rupture had taken place.—*Phil. Med. News*, March 12, 1892.

**Reece (M.), on Pilocarpine in Peritonitis.**—A not inconsiderable experience in the treatment of peritonitis with muriate of pilocarpine has led me to rely upon it as the chief agent in the management of this perilous disorder.

Twenty-four cases have been treated, including the idiopathic, traumatic, and septic forms of the disease. Of this number four were fatal.

Just here I wish to say a few words respecting the different forms of the disease. I am quite well aware that it is claimed by some that, strictly speaking, there is no such thing as idiopathic peritonitis, and that it is always and invariably the result of some lesion, a ruptured Fallopian tube, or the escape of fluids into the peritoneal sac, or from septic or traumatic causes. Nevertheless, I think it is within the experience of most practitioners of our art to have had cases where no other cause could be found than a wetting, or lying upon the damp ground.

It is also a fact, for which no adequate explanation as yet has been given, that while there is frequent idiopathic inflammation of other serous membranes, that of the abdomen is more liable to disease from septic and other causes than, for instance, that of the pleura or pericardium.

I am a strong believer in the surgical treatment of peritonitis in appropriate cases.

I do not claim that this remedy (pilocarpine) is a specific, but believe it better

than the exclusive reliance on opium, nor do I believe that experience will finally justify the cathartic plan of treatment.

The philosophy of the action of pilocarpine I leave to others, but taking into consideration the fact of the intimate sympathy existing between the skin and the mucous and serous membranes lining the cavities of the body, we may easily conceive how the skin may take on under the peculiar influence of this medicine, a vicarious action, as it were, and transfer a morbid or pathological action to an organ acting physiologically, to be sure, but to an excited or overwrought degree.

The most convenient way to administer the muriate of pilocarpine is in the form of the tablet triturates, one tenth of a grain at a dose, every three hours, until the system is under the specific influence of the medicine. That is manifested by free salivation and profuse sweating. When this is brought about there is generally an amelioration of all the bad symptoms, lessened frequency of the pulse, respiration, and tenderness of the abdomen.

It will also be necessary to administer morphine in occasional doses, best given hypodermically, to relieve pain. While the morphine antagonizes to a certain extent the action of pilocarpine, still it is indispensable in the treatment of the peritonitis.—*Med. Standard*, March, 1892.

**Ellis (P. M.) on the Treatment of Hepatic Abscess.**—Commenting on MacLeod's proposal to use a rigid metal cannula in preference to rubber tubes for drainage, Ellis says: The objection to the method advocated appears to me to be the impossibility of thereby securing that free drainage which he rightly regards as most important. As these abscesses are usually deeply situated in the substance of the organ and are of irregular shape, I believe it will in the majority of cases be found practically impossible to gauge their size and exact situation by means of a rigid probe passed through a narrow cannula in the way he suggests; nor is the advantage of opening them in the most dependent situation, even if this was generally possible, of as much importance as the selection of a favorable site for the external incision. Those who are familiar with the ordinary contents of a tropical liver abscess know how readily even a large-sized drainage tube is blocked by the pus and débris of

the hepatic tissue, and this, in the case of an abscess cavity, the walls of which are not collapsible, can only be overcome by a *vis a tergo*.

The plan I have adopted in a succession of successful cases has been to introduce two non-perforated rubber tubes side by side into the cavity of the abscess at the time of the operation, and then by inserting the nozzle of an ordinary irrigator into one to wash or siphon out the contents of the cavity once or twice a day with a weak solution of iodine or carbolic acid. By this means not only is the cavity kept aseptic, and any tendency of the pus to gravitate into the dependent portion of the organ obviated, but the growth of granulation tissue accelerated. If the tubes are in the first instance pushed to the bottom of the cavity and gradually withdrawn as it closes, no necessity for any further operative interference is likely to arise.

The real secret in the treatment of these cases is a sufficiently large incision through the external tissues in the first instance, for if the external opening is sufficiently large, there will be no danger of the pus finding its way into other organs, or into

the peritoneum when once the abscess is opened.—*British Med. Jour.*, Feb. 27, 1892.

**Braymer (O. W.) on Fluid Extract of Pichi and Renal Colic.**—If we see a patient for the first time when he is in his greatest pain, the first thing to do is to give a hypodermic of morph. sulph. together with atrop. sulph. in doses to suit the age and conditions of the patient. Apply warm applications to the abdomen and back, and give ext. pichi fl. in large doses internally, together with the free use of lithia water. These remedies should be used for a long time.

From the use of the remedy in several cases Braymer concludes as follows :

We are led to believe that pichi has some power to help in the disintegration of calculi, either renal or vesical. The use of the lithia water is twofold—it acts on the calculi and also flushes out the kidneys, which is a prime factor in the treatment of this disease. Finally, in morph. sul., with atropia to relieve the pain in the acute attacks, followed with pichi fl. ex. in full doses, together with the free use of lithia water, we have the ideal treatment.—*Med. Age*, Jan. 11th.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

**Gaither (C. Bradley) on the Treatment of Urethritis; with Special Reference to Oberländer's Endoscope.** What are the special advantages of the Oberländer endoscope?

In the first place, it is the only one in the world which gives direct observation from a light burning free in the air at the point of inflammation. Secondly, it has a rheostat by means of which the light can be increased or diminished at will. Thirdly, the light can be used for the purpose of direct cauterization.

What are its main disadvantages?

First, it is extremely complicated, and very liable to get out of order if not used carefully. Secondly, the most delicate parts must be sent to Dresden for repairs. Thirdly, the water apparatus requires the introduction of running water.

Dr. Oberländer divides all cases into two great classes: first, affections of the mucous membrane without marked participation of the glandular elements; second,

those forms in which the glands of Littre play the important part.

In the first class the inflammation is diffuse, and does not result in localized contraction. It is subdivided into two forms: (a) urethritis mucosa hypertrophica; (b) urethritis mucosa catarrhalis.

The treatment consists of ordinary injections, preferably nitrate of silver, 1-1000 to 1-5000, alkalies, cubebs, and copaiba. After six weeks, if the discharge continues, examination by endoscope and the injection of 4 to 10 per cent. iodoform in oleum dulci amari. In the glandular variety hot solutions of nitrate of silver, 1-4000 to 1-2000, introduced as far back as the deep urethra.

Oberländer's endoscope stands alone in its ability to treat by means of direct cauterization with the electric light, a certain number of cases in which the discharge is kept up by chronic inflammation of widely separated glands of Littre. These are often the patients who come with the



history "that after alcoholic or sexual excesses they notice a slight discharge, which has always disappeared gradually, only to be lighted up again on the slightest provocation."

By inserting an especial platinum light it is possible to cauterize each minute gland separately, and as the burned surface does not extend over five millimetres, no stricture is produced.

It is impossible to cauterize too deeply, as the moment the light touches the mucous membrane the current is broken and the light extinguished. By breaking the contact the light is re-established, and one sees how much has been cauterized, and whether it is necessary to burn more deeply or not. If the condition is recognized, it is possible to cure at one visit a chronic case that would run on indefinitely under any other method of treatment.—*Maryland Med. Jour.*, Feb. 13, 1892.

**Wickham (Edmond) on Treatment of Acute Gonorrhœal Cystitis by the Essence of Santol.**—Writer reports in full six cases, and furnishes the following notes: That oil of santol is especially serviceable in gonorrhœal cystitis, given in six-minim capsules, two at a time, at regular intervals up to twelve or sixteen daily. There is an absence of gastrointestinal symptoms and eruption common in cubebs or copaiba. In cases where the pyæmia is persistent, the deep instillation of twenty minims of nitrate of silver into posterior urethra and neck of bladder is indicated.—*L'union médical*, Dec., 1891.

**Norton (A. T.) on Tumors of the Bladder.**—The writer reports eight cases of tumors of the bladder operated upon by himself—six females, two males. In women he prefers to dilate urethra and remove in this way; in men he prefers the suprapubic operation.

He shows three specimens, illustrating three forms of papillomatous tumors of the bladder:

A. Villous or fringe-like tumors arising from mucous membrane without a pedicle, and then generally multiple, in some cases covering the whole of the bladder.

B. Villous tumors with a fibrous pedicle, capable of being completely removed, and probably non-recurrent.

C. Tumors with broad fibrous base, sessile, sometimes villous, sometimes difficult to recognize from epithelioma, more difficult to remove completely.

**Diagnosis.**—The diseases which simulate tumors of the bladder are stone in the bladder and stone in the kidney. The following table gives an idea of the signs present in each:

	<i>Tumor of Bladder.</i>	<i>Stone in Bladder.</i>	<i>Stone in Kidney.</i>
Blood.	Large clots.	Clots in shreds.	Mixed freely with the urine.
Mucus.	Often none.	Always present.	None.
Pus.	None.	Quantity corresponds to amount of mucus.	Pus present in quantity, with little or no mucus.
Irritability of the Bladder.	None unless the tumor enters urethra.	Great.	Depends on presence of pus.
Pain.	None unless in region of meatus.	Always marked, and extending to perinæum.	Pain in one or both loins.
Sound.	Occasionally slides over soft tumor.	Detects stone.	No result.
Cystoscope.	Detects tumor unless much blood.	Detects stone.	No result.

—*Med Press and Circular*, Feb. 10, 1892.

**Bangs (L. Bolton) on a Peculiar Accident during a Litholapaxy.**—In performing the operation of litholapaxy the re-introduction of the lithotrite was prevented at the prostate.

After a trial of various instruments for a half hour it was impossible to reach the bladder by the urethra. The bladder was then quickly opened by the suprapubic method.

It was found that a moderate amount of median hypertrophy of the prostate existed, and a prolongation of the left lobe backward into the bladder, the urethra entering the bladder through this medio-lateral hypertrophy. The lateral projection was soft and flexible, and behind this, thrusting it forward toward the right, was the remaining large fragment of stone, caught between it and the posterior wall of the bladder. It had, after the first washing, fallen behind this prostatic obstruction in such a way as to close the internal orifice of the urethra and completely shut off access to the bladder by way of the urethra. The point of the instruments easily entered the prostatic urethra but immediately impinged upon this *dislocated* (so to speak) wing of the prostatic body which was firmly held by the fragment of stone behind it.

This condition of things would never have been appreciated but for the opening in the bladder and the associated

explorations. It seems to be worthy of note because of its peculiarity and also because it may have some bearing upon a closer discrimination as to the choice of operation.—*Maryland Med. Jour.*, Jan., 1892.

**Wishart (J.) on Abdominal Nephrectomy for Hydronephrosis with a Report of Two Operations.**—The following conclusions are submitted by the writer :

(1) That in a large proportion of cases of advanced hydronephrosis, where the tumor fills the abdomen, it is impossible for the average operator to say whether he has a cyst of the kidney or an ovarian tumor.

(2) That, supposing hydronephrosis is suspected, it is not possible to say which kidney is the diseased one.

(3) The last two propositions being admitted, it follows that, in all these advanced cases, incisions in the loin and drainage cannot be advocated, as the surgeon is unable to say which side to incise.

(4) In view of these difficulties in diagnosis, it would seem preferable to make an incision in the linea alba and complete the diagnosis with the hand. If the case be a cyst of the kidney, carry the incision upward and complete the operation by enucleating the tumor.

(5) This operation is suitable alike for cases of hydro- or pyo-nephrosis, the danger of course being greater in the first.

(6) That abdominal nephrectomy by the median incision is a difficult operation, owing to the high position of the tumor, the close relations of the aorta and vena cava, the large size of the renal vessels, and the fact that the tumor is behind both layers of peritoneum.

(7) If a correct diagnosis could be made, he is of opinion that abdominal nephrectomy by incision along the linea semilunaris is the best operation for the class of cases under consideration, but he does not think it possible to remove such large cysts by incision in the loin.

(8) In the case of a weak patient, or one advanced in years, supposing the abdomen to have been opened, it might be the safer procedure to open the cyst and drain from the loin. This operation is safer than nephrectomy, but it usually leaves a permanent fistula.

(9) In view of the symptoms observed in the two cases reported, he thinks it would

be advisable, in completing the operation of abdominal nephrectomy, to secure drainage by making an opening in the loin.—*Canadian Practitioner*, Jan., 1892.

**Wishard (W. N.) on Notes on the Surgery of the Prostate.**—The following clinical notes are based upon the observations furnished by the cases narrated. They are presented with the belief that bladder surgery, particularly in the past six years, suggests these principles :

*First.*—That a large per cent. of cases of prostatic cystitis which are not susceptible of relief by the well-known methods of palliative treatment can be more or less permanently relieved by surgical interference.

*Second.*—That perineal and supra-pubic incision are the two methods best calculated to accomplish the results sought.

*Third.*—That neither one of these operations is suitable in all cases and that both may sometimes be required.

*Fourth.*—That the objects of a radical operation should be the removal of the mechanical obstruction to urination, and to secure drainage and rest for the bladder.

The author furnishes the following conclusions regarding the choice of operation :

*First.*—It appears in the very valuable collection of one hundred and thirty-three cases by Dr. Belfield of operations upon the enlarged prostate, that the perineal operation is safer than the supra-pubic. The rate of mortality by the supra-pubic incision is 16 per cent., and by the perineal 9 per cent.

*Second.*—Inability to reach and explore the bladder by a perineal opening is said to exist in 30 per cent. of all cases.

*Third.*—Where it is possible to reach and explore the bladder by perineal incision, it is generally not possible to do so with the same thoroughness as by a supra-pubic incision.

*Fourth.*—Where there is an elongated prostatic urethra, it is generally associated with a rectal tumor of large size, and the increased length of the prostatic urethra and the consequent increased perineal distance is approximately indicated by this fact, and by measuring the distance with a catheter from the meatus to the point where urine is obtained. A large rectal tumor was accompanied by an elongated prostatic urethra in some of the cases.

Where there is a large rectal tumor he prefers the supra-pubic operation, on account of the length of the prostatic urethra. Twelve cases are reported—ten by perineal section, one by supra-pubic cystotomy, one by combined methods.

In four cases marked diminution in the size of the rectal tumor has followed puncturing the lateral lobes with a small curved galvano-cautery point. The latter was used through a Ferguson's rectal tube introduced through the perineal opening, and inspection was aided by reflected light from a head mirror. The punctures were made to the depth of one half to three quarters of an inch and from two to six in number. Definite location of the desired point of insertion of the cautery may be obtained by digital and ocular examination. A small straight tenaculum passed along the finger secures the objective point, and the tube then passed into the wound over the tenaculum, the secured mass can be more fully exposed by being drawn into the mouth of the tube. In the cases thus treated no ill effect has been observed. Prolonged drainage was used, and the small resultant slough occasioned no inconvenience.

A brief summary indicates that where death followed perineal incision the danger would not have been lessened had the supra-pubic opening been employed. One died from immediate shock and one from uræmia ten days after operation. In one where combined incision was made, death was from shock. In these three cases death would have occurred in a short time from existing pathological conditions had no effort at surgical relief been made. The presence of stone in case No. 7 did not seem to be an influence in the result. Rectal distention with a six-ounce bag was attended by pronounced arterial depression and respiratory disturbance. In two other patients where the writer did supra-pubic cystotomy for causes other than enlarged prostate, the use of the rectal bag had to be discontinued, as in case No. 7, because of the shock it produced. In case No. 5 the fatal termination from renal disease was five and one half weeks after, and not due to the operation.

Residual urine was present in varying quantities in the cases operated upon. Its amount was greater where there was a large rectal tumor present. It was not found after recovery in but two instances,

viz.: Nos. 8 and 9, and then in small quantity. However, all were not subsequently examined to determine the amount of residual urine present after recovery. In No. 9, relief seems chiefly due to removal of stone, but the enlarged prostate had undoubtedly favored the formation of stone. The average age of the patients was sixty-two and one half years, and but three were under sixty-five. — *Journal of Cut. and Gen.-Urin. Diseases*, March, 1892.

**Lydston (G. Frank). Note on the Treatment of Epididymitis.**—The majority of practitioners are in the habit of dismissing their cases of epididymitis as cured as soon as the tenderness of the affected organs has sufficiently disappeared to permit locomotion. A moderate amount of induration of the epididymitis is usually regarded as of trivial importance.

He refers to the frequent sterility in males due to this condition, and considers it fortunate that man is endowed with two testicles.

Patients of a gouty, tuberculous, strumous, or syphilitic diathesis are peculiarly liable to permanent induration and blocking up of the epididymitis. Certainly there is more to be done than the relief of pain and difficulty of locomotion.

The indications, then, in a case of epididymitis are not only to get the patient about, but to use such means as tend to produce absorption of the inflammatory exudate. These means may be required for a long period.

Internal treatment should comprise such measures as tend to correct cachexia or to remove any diathetic condition that may be present.

Such drugs as mercury and iodine, the salicylates and colchicum, also the chloride of ammonium, are of value.

Counter-irritation is of value. The ung. iodinii co. is very useful. By far the best local measure is the application of faradism and pressure.—*No. Am. Pract.*, Jan., 1892.

**Moullin (C. Mansell) on Perineal Drainage in Inveterate Stricture of the Penile Part of the Urethra.**—It is a mistake to suppose that strictures of the penile part of the urethra are invariably, or even frequently, the result of cicatrization. Occasionally the mucous lining is destroyed by injury for more or less of its circumference, or eaten through by ulcera-

tion ; but nearly always, as Berkeley Hill and others have shown, if the urethra is laid open, the membrane can be dissected off, thinned, and discolored, it is true, but intact and capable of being unfolded its whole width.

The stricture is due to peri-urethral deposits. The problem is how to ensure the absorption of this deposit without causing the addition of more.

Division or divulsion gives temporary relief ; but the only method is to free the tissues from every source of irritation and secure for them a long period of physiological rest.

The writer reports a case of rupture of the urethra with extensive extravasation of urine due to close stricture. Free incisions were made and drainage by perineum for six weeks, when, on examination, the stricture had disappeared.

Four cases operated upon by perineal section and drainage were cured for six weeks ; two had internal urethrotomy done at the same time, while the other two were not cut in the penile portion. All four cases did equally well, and the stricture tissue entirely disappeared.—*The Lancet*, Jan., 1892.

#### Streett (David) on Hæmoglobinuria.

—Hæmoglobinuria is a pathological condition in which an essential feature is the presence of hæmoglobin in the renal excretion.

Being secondary to hæmoglobinæmia, it is not, *per se*, a disease, but one of the clinical phenomena occurring during the progress of a very obscure condition.

Hæmoglobinæmia, itself the effect of an occult process, is a step nearer the *primary* cause than hæmoglobinuria.

So far as is known, the primary lesion is the vacation of the stroma of the red blood corpuscle by its component, hæmoglobin. The blood contains, dissolved in its serum, freer hæmoglobin, rendering it brighter red than normal blood serum. The kidneys are normal in size, or somewhat enlarged, and occasionally inflamed.

Examination of the blood during a paroxysm shows the presence of microcytes and poikilocytes. The kidneys are of a dark chocolate color, and on section present a brownish, striated appearance.

Hæmoglobin is also deposited in the spleen, which is usually of normal size, or somewhat enlarged and pigmented. It is likewise deposited within the liver and marrow of bones.

Ecchymoses have been observed in the mucous membrane of the stomach and intestines. Mild attacks of hæmoglobinuria are inaugurated by *correspondingly* mild symptoms, such as slight headache, thirst, gaping or yawning, malaise and debility, and followed by voiding renal excretions, having a dark or chocolate-brown appearance. In a few hours the symptoms have disappeared and the fluid excreted by the kidneys is normal or pale in appearance, and the invalid is as well as usual except the slight languor and debility which succeeds the attack.

In cases of *average* or *greater* severity, the attacks are sudden, and ushered in by a chill or chilly sensations, with gaping, nausea, great physical depression, general malaise, pain in head and limbs, and thirst. This is followed by rise of temperature to 101° F. or 103° F., increased cephalalgia, thirst, and vomiting.

Some cases at this period have sub-normal temperature and a pulse less frequent than normal, with skin cold and cyanosis in cheeks, nose, and lips.

The renal excretion has a sanguinolent appearance, and stains white surfaces *similarly* to blood. It is of a dark red, chocolate, or purple color, *acid* in reaction, has a specific gravity ranging from 1,005 to 1,015, and upon testing with heat and nitric acid yields a coagulum, *smoky* in color and floating on *top* of liquid in test-tube, instead of *precipitating*, as serum-albumen *usually* does. This is *presumably* the *globulin* of the *hæmoglobin*, which was dissolved in the blood *serum* and is *now* eliminated by the kidneys. Microscopical examination reveals the presence of hyaline casts, some of which have adherent, reddish granules, and casts of the same reddish material, a few detached and degenerated cells of tubules, and a *field covered* with a fine, reddish, amorphous material. Blood cells are *conspicuously* absent ; *occasionally*, but *rarely*, phantom cells are seen. Iron is also revealed in urine by chemical examination.

Crystals of oxalate of calcium are sometimes present, and, *rarely*, crystals of hæmoglobin.

Causes : exposure to cold ; also heat, anxiety, worry, late study and little sleep, infectious diseases—malaria, typhoid, diphtheria, scarlatina, and syphilis. Chlorate of potash, carbolic acid, creosote, naphthol, pyrogallallic acid, nitro-benzol, arseniuretted

hydrogen, sulphuric acid, hydrochloric acid glycerine, and even distilled water were administered hypodermically.

The edible mushroom, *Helvella esculenta*, contains a substance which causes the disease in a severe form.

*Violent* or *prolonged* physical exertion, and in some cases even *moderate* muscular exercise, excites an attack. It occurs in males more frequently than females.

Morning seems to favor the attack, possibly because it is often caused by cold, and in the morning the temperature of the body is lowest.

In treating the disease, the primary object is to maintain the normal temperature and support the enfeebled circulation.

This is best accomplished by placing patients in bed and surrounding them with bags or bottles of hot water, hot bricks, etc., and giving hot drinks, covering well with blankets. If prostration be marked, carbonate of ammonia and brandy may be administered.

Nausea and emesis may be controlled by the usual remedies—creosote and lime-water, subnitrate of bismuth, morphia sulphate, and counter-irritation over epigastrium.

Ergot benefits by lessening the renal circulation, and the rapidity with which hæmoglobin is brought to the kidneys for elimination. The hæmoglobin, being thus gradually filtered out, is less liable to obstruct the renal tubuli, cause irritation, or nephritis. Bicarbonate of potash, grs. x., in glass of sweetened water every four hours is a good diuretic in these cases. Stimulating diuretics are contra-indicated. The best of all diuretics here, as in many other diseases of the kidneys, is abundance of water. Lithia water conveys benefits by lessening the irritation of the urates.

If the attack be due to the malarial organism, quinia should be given in doses sufficient to arrest it, and prevent the development of other paroxysms.

If indicated, aperients should be used. If a specific history be obtained, mercury and the iodide of potash should be given. *Maryland Med. Journ.*, Jan. 30, '92.

**Cotes (C. E.) on a New Treatment of Acute Gonorrhœa.**—Patient first made to micturate and thus remove the discharge from the urethra as far as possible.

The endoscopic tube, warmed and oiled, is then passed into the urethra, the patient lying on a couch. The urethra is then mopped with dry cotton-wool fixed in a stylet, and examined by the electric light. A mop of cotton-wool on a stylet, and charged with a solution of silver nitrate (ten grains to the ounce of water), should then be passed down the endoscopic tube and thrust through its distal aperture. The tube and the mop are then withdrawn simultaneously. By this means the walls of the urethra contract upon the mop and are thoroughly moistened by the solution. For the two inches of the urethra near the meatus a fresh mop is used, so as to completely saturate this portion of the passage in which the disease commences, and where also the inflammation is most intense. Only one application is made. Internally, alkalies and copaiba are used and injection of Condy's fluid, six times a day.

If much pain is caused by the introduction of tube, cocaine should be used. Forty-two cases were treated by this method, and a cure claimed in an average of twelve days.

The main points of the treatment are :

1. The treatment rests in the hands of the surgeon instead of being left to the patient.
2. The urethra can be thoroughly cleansed, so that there is no doubt that the remedy is applied directly to the affected mucous membrane. Examination of the urethra by the endoscope immediately after micturition and injection almost always shows that there is still a thick, coagulated discharge adherent to the walls, indicating the mechanical difficulty an injection would have had in acting directly on the mucous membrane.
3. The exact extent of the inflammation can be seen, and the remedy applied to its extreme posterior boundary.
4. The remedy is applied to the urethral walls when they are distended and stretched by the endoscopic tube, so that all furrows are obliterated.
5. Stronger applications can be used with safety because the remedy is no longer applied blindly or by unskilled hands, and I have no hesitation in saying that the use of the endoscope allows play for a good deal of delicacy in touch.
6. There is no fear of the application carrying the infected material to the distal part of the urethra, and thus giving rise to complications.—*The Lancet*, Feb. 27, 1892.

## REPORT ON GYNÆCOLOGY.

BY W. EVELYN PORTER, M.D.

**Tait (Lawson) on a Reconstruction of the Pathology of Uterine Displacements Based on Johnstone's Discoveries in the Physiology of the Uterus.**—The valuable contributions to the biological history of menstruation which have recently been made by Arthur Johnstone necessitate a reconsideration of uterine and ovarian pathology as well as physiology.

For those who are not familiar with Johnstone's views the following summary is presented :

The uterus is considered as a muscular capsule having a serous lining outside for the purpose of freedom of visceral movements and a glandular lining inside, the function of which is to secrete the nidus or nest in which alone an impregnated ovum can safely reach maturity. This glandular function is rhythmical, and the nidation cycle occupies a month, the completion of the glandular secretion being marked by the end of the menstrual flow. This menstrual flow Johnstone shows completely is necessitated by the upright position of the human animal. It is only (leaving ectopic accidents out of the question for the present) at the completion of the glandular function, that is, when the nidus is completely cleared out and cleaned and its epithelial covering removed, that the implantation of an ovum is possible. Therefore it is that the age and maturation of an impregnated ovum are to be reckoned from the end of menstruation. But it by no means follows that an ovum comes over the denuded surface of the endometrium at the end of every menstrual cycle. Such a thing is quite unlikely, and in support of the uniform statements of the text-books to that effect there is not one single established fact which can be produced. There are, on the contrary, a vast array of facts which tend to show that ovulation is far less common than menstruation.

Ovulation occurs in infancy and continues a persistent and regular function into senile life, having nothing to do with menstruation as its cause.

The glandular elements of the endomet-

rium are absent in animals that do not menstruate, and also in women prior to the period of menstrual activity. Before menstruation the uterus is structurally the same as after its disappearance, and the conclusion is obvious that the uterus is really a temporary gland, a part of whose functional process is this objectionable menstruation. The size of the organ varies with its functional activity, and the muscular element is to be regarded as a mere capsule of the gland, the endometrium being essentially the important part. Such an exposition as this at once throws a flood of light on uterine pathology, especially upon such a disease as cancer and its peculiar relations to the uterus, and it seems an absolute key to the mystifying puzzle of uterine displacements, one of the most fertile fields of quackery which has yet been opened in the practice of medicine.

Uterine displacements may for clinical purposes be divided into three great groups: displacements downwards, the so-called displacement forwards, and the real displacement backwards. The first have an origin of a purely mechanical kind dependent upon the social status of the patient. The extreme conditions of prolapse are found almost exclusively among the poorer class of hospital patients, rarely in private practice among the better class. The reason for this striking difference is that women of the hospital out-patient class habitually get up after labor long before the natural supports of the uterus can sustain the uninvolved organ, the natural result being a progressive downward displacement.

This form of displacement is the immediate result, therefore, of subinvolution, and it does not occur in classes of women who can lie quiet in bed long enough for the process to be completed before they get up. In this process of involution exists the key to some of the most puzzling problems of uterine pathology. The protruded uteri of the hospital patients are of abnormal size, the endometrium retaining for months practically the same character it has when the placenta is first

detached. The profuse menstruation commonly occurring in these cases is usually relieved by retaining the uterus in its normal position by means of a shelf pessary. This very relief, however, is a source of danger, in that the patients are apt to leave the pessaries in place for months at a time, resulting in sepsis and consequent inflammatory troubles. An operation should be urged in every case, the perineum being extended forward as a support for the prolapsed organ.

Closely allied to this class of cases are those to which the author has applied the term "hospital uterus" from the fact of their frequent occurrence in hospital practice. They usually follow complications of childbirth, and are characterized by the presence of a subinvolution and retroversion of the uterus with chronic metritis. Menstruation is increased in frequency and duration, as well as in amount, and is generally followed by profuse leucorrhœal discharge, weakness, and severe pains.

Appreciating the fallacy of the old views in regard to the use of pessaries in these cases, Mr. Tait has abandoned their use and adopted the following course of treatment: Having found that the potash salts had specific action upon the subinvolted uterus, he gives five grains of the chlorate dissolved in a few drops of muriatic acid, three times a day. To this he occasionally adds a small amount of ergot during each menstrual period. In 85 to 90 per cent. of all uncomplicated cases the uterus is diminished in size, resumes its normal position, and the symptoms are relieved. Of course treatment of this kind must be protracted; in the majority of cases six months being required to effect a complete cure.

The cases resisting this treatment are those of endometritis and perimetritis. For the first-named condition, thorough curettement is indicated, and if a laceration of the cervix exists it may be stitched at the same time. The results obtained are almost uniformly good. Where perimetritis exists there is usually disease of the tubes and ovaries, and the treatment should depend largely upon the severity of the symptoms. If the pain and discomfort are but slight, nothing whatever should be done; while if the conditions are more serious, laparotomy with removal of one or both appendages may be necessitated.

In a few isolated cases, where retroversion is due to traumatism, as from jumping or falling from a carriage, the pessary may be of service.

Cases of faulty development of the uterus and appendages, with or without ante-flexion, are rarely relieved by mechanical measures, although in married women curettement will help a large number of them into the condition of maternity, which in turn usually effects a cure.

The man who uses a vaginal pessary for a condition of ante-flexion or anteversion, is certainly a person to be held aloof. The real trouble in these cases lies in the want of development of the endometrium, and treatment should be directed toward this very condition. With young patients, between the ages of seventeen and twenty years, iron in the form of the perchloride should be given in small doses and continued for a year or more at a time, as it favors hyperæmia and growth of the organ. Great assistance is also gained by exercise, good food, fresh air, and everything which tends to general health and aids growth. By these means menstruation often becomes regular and normal in amount, and the numerous distressing symptoms are relieved. Local treatment in the way of curettement should not be resorted to until the cases present themselves as married women.—*The Provincial Medical Journal*, Feb. 1, 1892.

**Polk (Wm. M.) on Drainage with Gauze-Packing as Applied to the Uterus in Chronic Endometritis and Chronic Metritis, not only when these Conditions Exist Independently of Salpingitis or Other Forms of Perimetritis, but also when they are Associated with such Disorders.**—As indicated by the title, the subject covers a large class of cases presenting themselves to the gynæcologist for treatment. The subject of drainage as applied to the uterus, is an old one; but owing to a doubt of the efficacy of some of the methods tried, and a dread of the dangers involved in the application of others, it has not made much headway among the profession at large. Experience in the operation of vaginal hysterectomy has done much to overcome old prejudices and enlighten the profession in regard to the essentials of success in treating the uterus. It is only necessary that we should be scrupulously clean and provide for escape of infecting material, should any be

present, by adequate drainage. The author first urged upon the profession the advantage of gauze packing, in 1888, and now repeats it as the result of a more extended experience, including a wider application, his last efforts being in the direction of chronic metritis and salpingitis.

The method has been applied to acute as well as chronic inflammation of the uterus and appendages, but the purpose of this paper is to call attention to its use in chronic inflammatory disorders only, such as

1. Chronic Endometritis.
2. Chronic Metritis (Subinvolution).
3. Chronic Metritis, with Associated Salpingitis.

The cases of endometritis have in the main been due to puerperal and gonorrhœal infection, although some originated in stenosis, (existing in flexions). Endometritis fungosa or hæmorrhagica, which was present in some of the cases, responded well to treatment. The cases dependent upon flexions proved most troublesome, the flexions having to be remedied, either at the time or subsequently, by pessaries, Dudley operation, or the stem. The most striking results were obtained in chronic metritis with subinvolution. The *modus operandi* in these cases is obvious, and in those associated with chronic salpingitis the process is essentially the same, although the methods of treatment suggested are at direct variance with the common doctrines on the subject. By attacking the inflamed endometrium, however, we prevent the extension of disease into a previously healthy appendage, the treatment proving of especial service in cases of unilateral salpingitis.

In all cases one should seek to allay any acute process that may be at work, by some of the ordinary measures, such as rest, saline purgatives, hot-water douches, and glycerinized cotton tampons. But when the acute symptoms subside, and evidences of persistent chronic inflammation continue, the operation should be performed.

The depletion of the uterus, which is the essential feature in the operation, is greater than in any other known measure, and upon this depends its efficacy when properly applied. When improperly done there is danger of producing inflammation, but not otherwise. Temperature tracings in forty cases presented show slight elevation of temperature immediately after the

operation, and in cases of pronounced uterine colic the tracing remains high for twenty-four or thirty-six hours, after which it subsides and remains down. No inflammatory changes developed as a result of the operations, and the masses existing in some of the cases previous to the operation lessened in size and the tenderness diminished.

In considering the subject of packing the uterus with gauze. It should be borne in mind that it is essentially an operation.

*First, as to the materials or instruments required.*—They are soap and water, solution bichloride 1:2000 and 1:500, a strip of sterilized cheese-cloth the width of the index finger, containing about four thicknesses of the cloth—the whole about three feet long; a small can of sterilized cheese-cloth, a large-sized cervical speculum with an interior diameter of about five sixteenths of an inch. This diameter should be maintained from one end of the speculum to the other. The instrument should be straight, although a slight antero-posterior curve may not be objectionable. It should be provided with a plug, which, projecting from its further end, facilitates introduction. A Sims tampon screw; a volsellum forceps to fix, and when possible draw down, the uterus; a long dressing forceps, a Sims or bivalve speculum, a good dilator or a set of the hard-rubber dilators, a sharp curette, a fountain syringe with a glass-tube nozzle, or else a soft catheter of about the same size as the glass tube, say No. 8. To these I will add but one other essential, namely, an anæsthetic. In seventy-five per cent. of all cases I believe general anæsthesia necessary; in twenty-five per cent., to be found chiefly among cases of subinvolution, the os internum is sufficiently open to admit of the procedure with the aid of local anæsthesia only.

*The Operation.*—Cleanse the vulva, the vagina, and the cervical canal, as if it were your intention to take out the uterus—which means that with soap and water and bichloride you must be thorough—now dilate the cervix so that you may introduce the speculum; then irrigate the interior of the uterus with bichloride 1:2000, keeping the cervical speculum in place while so doing, because it insures the return flow of the fluid as no uterine irrigator can; next use the sharp curette thoroughly over the entire surface of the uterine body, gauging the energy of your attack by the density



of the walls as indicated by their resistance; repeat the washing with bichloride solution through the speculum as before. At the commencement of the anæsthetic you place the gauze (the strip as prepared for the interior of the uterus, and a good piece as it comes from the can) in the 1:500 bichloride solution; there it remains until you have completed the irrigation, which is made subsequent to the curetting; take it now from the solution and throw it into hot water in order to free it of the excess of the mercuric salt. Squeeze the strip dry, and then by means of the tampon screw carry it section by section through the cervical speculum into the uterine cavity, packing it firmly in place, first in one cornua, then in the other, until the excavation is filled down to the internal os. Then bring the end of the strip out into the vagina and coil it up against the cervix. Next squeeze dry a portion of the gauze left in the hot water and place it loosely in the vagina. This completes the operation.

The subsequent treatment consists of rest in bed for a week, the use of a saline cathartic on the second day; hot fomentations over the supra-pubic region if there be disturbing pain. The gauze is left undisturbed in the uterus until the sixth day, when in case it has not been expelled by contractions it is removed; a cleansing vaginal douche is then given, and the next day the patient is allowed to get up. As soon as she is sufficiently strengthened she is allowed to return to her usual avocation. As a rule, but one packing is needed, but if another is desirable, as in certain cases of salpingitis or endometritis fungosa, it is made without anæsthesia at the time of withdrawal of the gauze, as the internal os is then well open.—*N. Y. Journ. of Gyn. and Obst.*, Feb., 1892.

**Pryor (Wm. R.) on Curetting the Uterus as an Operative Preliminary to a Proposed Laparotomy.**—The author is of the opinion that the majority of pelvic diseases in women begin in an endometritis, even including tubercular affections.

Of the new growths in and about the uterus, few reach an inconvenient size without manifestation of their existence being shown in the endometrium. All cases of pyo-salpinx, whether due to gonorrhœal or post-partum infection, are accompanied by a most vicious form of

endometritis. Hydro-salpinx may, however, be present without the co-existence of this condition. Many are the cases in which laparotomy is performed for pyo-salpinx, the patients recovering from the operation, yet not relieved of the symptoms due to a persistent endometritis. One should therefore attack the original cause of the pelvic lesions, destroying the inflamed endometrium, before proceeding to the graver operation. By doing this the convalescence will be more satisfactory, and, as shown by the following case, the symptoms may be entirely relieved.

A patient having married a man with gleet, consulted the writer on account of profuse menstruation, followed by a purulent leucorrhœal discharge coming entirely from the cervical canal. An operation was advised but refused. In a few days a sudden peritonitis developed with rapid enlargement of one tube. In the midst of an acute pelvic peritonitis and salpingitis, curettement, as described below, was performed. The patient came out of the anæsthetic relieved of her pain, and the peritonitis gradually subsided, as did also the distention of the tube. A few weeks later she returned to her professional work with a movable uterus, and with but a faint trace of tenderness on one side. Menstruation subsequently was normal, and the endometritis which caused the destructive disease in one tube was cured. The uterine end of the tube was in all probability still patent, and the contents evacuated in that way. Had both ends of the tube been absolutely occluded the result might not have been so satisfactory.

The details of the operation employed consist in thoroughly dilating the uterus, curetting with a large sharp curette until the entire endometrium is removed, and the uterine cavity freed from sepsis.

At intervals the uterine cavity should be irrigated with a 1:3000 bichloride of mercury solution, and after completing the curetting it should be tightly packed with iodoform gauze, the end of the strip of gauze being left protruding from the cervix. The vagina then lightly packed with the same dressing. Should you desire to do the more radical operation later, the gauze should be removed, say on the fifth day, and the parts cleansed, leaving an absolutely aseptic condition. The advantages of this measure as a preliminary to operations for the cure of fibroids or can-

cer are obvious at once. The canal is cleansed, and its surfaces being left denuded occlusion is much more likely to occur in the event of leaving a stump to be treated extra peritoneally.

In conclusion, it may be said that there is no gynecological operation which has so wide an application as curettement, when properly performed. The sharp curette should invariably be used, the dull instrument having no place in scientific gynecology. The curetting should be most thorough opposite the tubal openings, where the membrane is thickest and hardest to reach if inflamed. The vagina should be scrubbed with soap and water and then with  $\text{HgCl}_2$  solution 1:3000. The same solution should be used for irrigation. The iodoform gauze may be made by soaking purified mull in  $\text{HgCl}_2$  solution 1:3000, rinsing out, and dusting thoroughly with iodoform until the wet gauze will contain no more. Never inject styptics into the uterus, nor use styptic cotton in these cases.

Most of the distress following laparotomy is due to the neglected endometrium and not to adhesions, and the cases of secondary pyo-salpinx occurring after removal of one side are likewise dependent on this condition. The persistent backache, the descent and posterior displacement of the uterus so often seen, are due to the uterus remaining enlarged and heavy from endometritis. All of these may be avoided by a curetting preliminary to the major operation.—*N. Y. Journal of Gynecology and Obstetrics*, Feb., 1892.

**Goodell (Wm.) on Catgut in Gynecological Operations.**—Among the objections to the use of catgut are: the difficulty of sterilizing it, the liability of its knot to untie, and the rapidity with which it is absorbed.

Recent experience has convinced the author that the objections are in a great measure groundless and that we have in catgut a most valuable surgical agent.

Having had several cases of ventral hernia following abdominal section, attention was drawn to the necessity of a buried fasciæ suture. For this purpose a continuous suture of catgut has been employed for two years with uniformly good results. In rents of the bowel and of the bladder, which are sometimes unavoidable in abdominal surgery, fine catgut sutures have been used with equal success. An advan-

tage of catgut over silk in intestinal work is the fact that the gut swells and completely fills the needle holes, should the mucous surface be inadvertently punctured. In such operations as most of the plastic work in the vagina, the radical cure of hernia and of anal fistula, the removal of the coccyx, the extirpation of the vulvo-vaginal glands, or of labial cysts and tumors, and the amputation of the hypertrophied and prolapsed cervix uteri, catgut sutures are advocated. In any deep wound where several rows of buried sutures are needed, they are of especial service; but in plastic surgery, where but a single row of surface sutures are desired, they cannot be depended upon. The writer has not himself ventured to use catgut in operating for vesico-vaginal or recto-vaginal fistulæ or in doing trachelorrhaphy, although he has often been tempted to use it in the latter operation. A diversity of opinion exists among gynecologists as to the advisability of using it in operations upon the cervix uteri, and bad results are reported following its use. Many European surgeons insert successive tiers of catgut sutures in operations upon the perineum, and some employ it extensively in their abdominal work. Dr. Goodell prefers other sutures in complete tears of the perineum, although, since seeing catgut so generally used by Martin, Mackenrodt, and Winter in their abdominal operations, he has adopted it and advocates it in all septic abdominal cases and those in which drainage is needed. In removal of fibroid tumors of the womb by the operation of supra-vaginal hysterectomy, the broad ligaments may with safety be ligated wholly with catgut. Where broad vascular regions have to be tied off, overlapping quilted sutures are used, and in tying large pedicles, as in ovarian tumors, two or three separate ligatures should be applied in place of the single Staffordshire knot. In vaginal hysterectomy for cancer catgut may also be used exclusively, the ligatures on the broad ligaments being drawn down and treated by the extra-peritoneal method. Nos. 3 and 4 of the German gut should be used, having been previously prepared in the following manner: To dissolve out the fat it is first placed in commercial ether for from twenty-four to forty-eight hours, according to the size of the gut, and if it is of the larger size the ether is changed once. The gut is now immersed for forty-eight

hours in a 1:1000 alcoholic solution of corrosive sublimate. It is then wound on glass spools by surgically clean hands, and kept permanently for use in a mixture of two parts of oil of juniper to one of alcohol, which is occasionally changed. When needed for an operation, he transfers the requisite number of spools to a mixture of one part of glycerin, which has been sterilized by heat, to nine of alcohol. This gives the gut greater smoothness and pliability. Thus prepared, it will last in the tissues of the body from a week to ten days.—*The Therapeutic Gazette*, Jan. 15, 1892.

**Kelly (Howard A.) on the Ideal Dressing for the Abdominal Wound.**

—The dressings of former years were essentially the same as those commonly applied to-day; consisting of cotton, sterilized or impregnated with antiseptic substances, or alternating layers of various impermeable materials on antiseptic gauze. The purpose of such a method depends upon preventing access of pathogenic germs by heaping up impassable barriers over the wound. The inconsistencies of the method are obvious when we consider how easily septic matter may reach the wound from the *mons veneris* or the creases of the thighs beneath the edges of the dressing.

To obviate this danger a solution or paste should be used over the dressing and about its edges, hermetically sealing the wound. To accomplish this the writer, after considerable study, has adopted the following method: After closure of the incision, the skin, the line of the wound, and the sutures are dried, and two layers of sterilized gauze or cheese-cloth, large enough to project from two to four inches beyond the incision on all sides, laid on the skin. This is saturated with the following adhesive mixture, which is evenly distributed over the whole surface:

- ℞ Squibb's ether, or washed ether, and alcohol, absolute.....equal parts.  
Bichloride of mercury (Merck's recryst.), enough to make the solution  $\frac{1}{1000}$ .  
(Anthony's) snowy cotton, enough to make a syrupy consistence, added in small pieces, stirring.

When poured on the wound this dries at once, the celluloidin hardens, gumming the gauze fast to the skin. The whole surface should then be freely dusted over with a finely powdered mixture of iodoform and boric acid.

- ℞ Pulvis iodoformi.....3 i.  
Acidi borici.....3 vii.  
M. Exactissime. Sig: Dust freely on wound.

This powder forms an invaluable protection, and is of service also in obstetrical work.

The wound thus sealed with celluloidin gauze may be left for a week or more, when the dressing should be softened with ether, removed, and the stitches taken out.

Local pain, tenderness or redness, with elevation of temperature, indicating supuration, should demand immediate removal of the dressing. Common cotton may be substituted for absorbent, and prepared cotton by previously sterilizing it in the Arnold steam sterilizers.—*Am. Jour. Obstetrics*, Dec., 1891.

**Bonifield (C. L.) on the Treatment of Abortion.**—The treatment of abortion includes its prevention when this is possible. In deciding this oftentimes difficult problem, three points are to be considered, viz.:

1. The amount of hemorrhage.
2. The degree of dilatation of the cervix.
3. The severity and duration of the pain.

If any of these conditions are well marked it is not safe to promise its arrest, and if all are present the final expulsion of the ovum may be confidently predicted. An effort should invariably be made to check the progress, however, unless the hemorrhage is profuse or dilatation extensive. Absolute rest of body, mind, and general nervous system should be obtained, the patient being kept in bed in a cool room and under the influence of opiates. A hypodermic injection of morphia first, followed later by opium, chloral, or bromide by mouth or rectum, will be found most satisfactory.

Should retroversion or flexion exist, it should be remedied at once by placing the patient in the genu-pectoral position and elevating the body of the uterus, the patient being subsequently instructed to lie on the side rather than the back. This alone may serve to arrest abortion.

*Viburnum prunifolium* is recommended as a prophylactic by Jenks, and McKee reports good results from the use of dioviburnia. The writer has used neither of them, however, preferring opium. In using opium it should be continued until the symptoms have subsided, or progressed so

far as to render abortion inevitable. If the symptoms subside the patient should be kept in bed for several days, and after getting up should be cautioned to return at once to bed upon the appearance of the slightest symptom, and at the time when she would menstruate were she not pregnant.

The treatment of inevitable abortion depends upon the condition of the cervix and amount of hemorrhage. If the cervix is not dilated and the hemorrhage trifling, as it usually is if the sac is not ruptured, the patient should be simply carefully watched without local interference. At any moment the sac may rupture and alarming hemorrhage ensue. Should this occur before the cervix is sufficiently dilated to allow of immediate delivery, the vagina should be thoroughly tamponed, thus controlling the hemorrhage and stimulating uterine contractions. In tamponing, a Sims speculum should be used, a small roll of iodoform gauze placed in the cervical canal, and the entire vagina carefully packed with small pieces of absorbent cotton, which have previously been immersed in an antiseptic solution. The perineum may be depressed by using two fingers and strips of muslin used instead of cotton in case of emergency, where instruments and dressings are not at hand. The tampon may be left undisturbed for from six to twelve hours, at the end of which time the ovum may be found in the vagina. If, on the contrary, it is still undetached, the hemorrhage continuing, and cervix undilated, an antiseptic vaginal douche should be given and the patient retamponed. This may be repeated, if necessary, once or

twice, but the cervix should then be dilated with the fingers or a Goodell's dilator, as repeated tamponing is not without danger. Lusk and Parvin advise the use of ergot at this stage, but the writer does not believe in it, as it acts chiefly on the lower portions of the uterus, tending to retain rather than expel its contents. Furthermore, ergot produces constant uterine contraction, which is not conducive to the detachment of the ovum in its entirety.

Previous to the fourth month every effort should be made to secure the expulsion of the ovum entire, otherwise portions of the chorion are likely to be retained. When this occurs the uterus should be entered at once, either by the finger or placental forceps, and every shred removed. The greatest care should be observed in every detail of antiseptics; the patient being placed with her hips on the edge of the bed, Sims speculum introduced, and the uterus drawn down with a tenaculum forceps. In using the placental forceps it should be introduced closed into the uterine cavity, the blades then slightly opened and their edges placed against the uterine wall and closed. If the operator feels that something has been grasped, he withdraws the forceps and removes the fragments from its jaws. This he repeats until satisfied that no remnants are left in the cavity. Then the uterus should be washed out with a warm solution of creolin. The after-treatment should be the same as that followed at full term, consisting of rest in bed for two weeks and the administration of quinine and ergot, if necessary to promote involution. — *Am. Jour. of Obstetrics*, Jan., 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

BY ALEXANDER H. TRAVIS, M.D.

**Prudden (G. M.) on Experimental Pneumonitis in the Rabbit.**—Injections were made into the tracheæ of thirty-four rabbits of emulsions of tubercle bacilli which had been sterilized and washed with large quantities of sterilized water. In one set of experiments the bacilli were boiled in glycerine. It was assumed that the emulsions contained no living tubercle bacilli, and that the poisonous materials which might have been

present in the original cultures, or clinging to the surfaces of the dead bacilli, in so far as they were soluble in boiling water, or in water and glycerine, had been removed. The animals were killed at intervals from the second to the seventy-second day. The writer thus summarizes the results: "These studies show that when dead tubercle bacilli are introduced in small flocculi into the air-spaces of the rabbit's lung, there occurs at their seat of lodg-

ment, first, a large accumulation of spheroidal cells in the air-spaces. This is immediately followed by a proliferation of epithelioid cells and formation of giant-cells in the contiguous air-spaces. Then occur gradual necrosis, disintegration, and absorption of the primary small-celled centre, and a conversion of the peripheral zone into very cellular and vascular new connective tissue. Hand in hand with the absorption of the necrotic centre, the new-formed connective tissue becomes denser and less abundant, until finally the seat of lesion is indicated only by a shred or patch of dense connective tissue, which, if the original lesion was not extensive, may be wholly invisible to the naked eye. Sometimes, however, but little connective tissue is formed, except in the walls of the involved air-spaces; but the nodules persist for long periods as a congeries of densely packed epithelioid and giant-cell masses."

It is also shown that tubercle bacilli retain the power of taking and retaining the characteristic stain long after their death, and that they slowly disintegrate and finally disappear when surrounded by living cells and by the body-juices. It may be assumed that only a certain proportion of the bacilli present in the body at a given time are alive.

The lesions produced by the action of the dead tubercle bacilli in the rabbit are closely similar morphologically in many respects to those produced by the living bacilli; but they are not indefinitely progressive, do not tend to generalization or to the production of an advancing coagulation necrosis, and do not induce an acute infectious disease. A further point of difference is that the necrosis developing under the influence of the dead bacilli attains its maximum development at once. The possibility is suggested that the development of tubercular tissue and the other accompanying cell accumulations may serve a conservative purpose.

Whether the characteristic cheesy degeneration of tubercular inflammation is due to eliminated metabolic products of the living growing germ, or some product or influence as yet wholly unknown, remains to be found out.—*N. Y. Med. Jour.*, Dec. 5, 1891.

**Nepvue (G.) on the Pathogeny of Cancer.**—At the end of his paper on the morphological changes in the neighborhood

of epithelial tumors N. writes *en résumé*: All around the epithelial tumor:

1. The capillaries undergo a series of interesting changes; swelling karyokinesis and rupture of endothelium; epithelial infiltration of the walls of the small vessels, which become the centres of growth of new cells.

2. The local circulation is embarrassed; congestion, stasis, coagulation.

3. The blood presents changes in places; increase in number and karyokinesis of leucocytes, destruction of red globules, diapedesis of white and red cells.

4. The lymphatics are filled with red cells, detritus, granules, delicate epithelium, cells filled with fuchsine bodies, and fuchsine bodies free and isolated. The lining epithelium is in places infiltrated with a large quantity of delicate granules, staining with fuchsine, and their nuclei are multiplied.

5. In the connective tissue; numerous wandering cells with nuclei or nucleoli separate from each other, all staining with fuchsine, all the size of fuchsine bodies, ten or twelve in number in each cell; infiltration in the fixed cells of granules staining with fuchsine.

6. Neither bacteria, psorosperms, or the fuchsine bodies of Russel, can enter into the pathogeny of cancer.

7. The fuchsine bodies have various origins: in the proliferation and setting at liberty of nuclei of leucocytes, in the destruction of red cells (Kleps), in the degeneration of lymphatic endothelium, or of fixed cells, or nucleolar proliferation of wandering cells.—*Marseilles mtd. Journal*, Jan. 15, 1892.

**Welch (W. H.) on the Bacillus Coli Communis.**—This bacillus, the most abundant of the bacteria in the normal fæces, W. has found in one or more of the organs of the body in thirty-three autopsies out of about two hundred. Lesions of the mucous membrane of the intestine, hemorrhages, ulcerations, perforations, inflammations, etc., open the way for the invasion of the colon bacillus into the blood and lymphatic vessels, and thence into the various organs and parts of the body. Only in two cases has W. found the colon bacillus in organs outside of the intestine without any demonstrated lesion of the alimentary canal. In a number of cases colon bacilli were demonstrated in various organs of the body with-

out any noteworthy lesion of the organs containing them, or any lesion that could reasonably be referred to their presence. This class of cases should make one cautious in attributing pathogenic powers to the colon bacillus, unless it can be shown that other causes can be excluded. That changes in the bile may be referable to the colon bacillus has been shown experimentally. It is usually found in the exudate of peritonitis due to perforation of the intestine, sometimes in peritonitis due to ulceration without perforation. The bacillus is occasionally present in laparotomy wounds after extirpation of diseased uterine appendages. Following typhoid ulceration of the bowel, the colon bacillus, mixed with the typhoid bacillus, from which it is distinct, may be found in the mesenteric glands, lungs, liver, kidneys, and elsewhere.—*Med. News*, Dec. 12, 1891.

**Whitwell (J. R.) on the Nervous Element in Myxœdema.**—The paper draws attention to the examination of the brain of a perfectly typical case of myxœdema, with marked delusions, intensely vivid dreams, and general mental obfuscation. There were no convulsive seizures. The case, a female aged thirty-seven, had been under observation during three years. The brain was slightly œdematous, and there was a slight diffuse atrophic condition of the convolutions. Sections were made from portions of brain removed from a point one inch from the upper end of the ascending frontal convolution, and were treated with osmic acid and aniline blue-black. The nerve cells did not stain well, their outlines were not as definite as they normally are, and the cells tended toward bulging and distortion. Their processes were either less visible or fewer in number, and in some cases were almost absent. There occurred inflated globose and curiously distorted nuclei, vacuolated, the vacuolæ in many instances apparently containing in their interior a somewhat highly refractile substance, which did not stain with aniline blue-black or osmic acid. In some cases the cell also showed vacuolæ, while in other cases the cell had disappeared, leaving only the vacuolated and distorted nucleus. This abnormal state of the nerve-cell nuclei was most marked in the so-called third and fourth layers of the motor cortex, and in some sections almost every cell was affected to a greater or less extent. There was in addition a distinct,

though not great increase of the connective tissue throughout the whole depth of the gray matter.

Similar conditions have been described in epilepsy, alcoholism with dementia, and in some cases of general paralysis of the insane. It is suggested that the lesion may account for some, at least, of the mental, motor, and sensory phenomena of myxœdema.—*British Med. Jour.*, Feb. 29, 1892.

**Von Jaksch (R.) on the Leucocytosis which Accompanies Lobar Pneumonia.**—I have often observed that the prognosis for the life of the patient in the cases of lobar pneumonia which run their course without the appearance of leucocytosis, is very unfavorable. These clinical observations are in harmony with experimental studies of Tchistovitch and Kikodze. New methods of treatment of such cases may be indicated by these facts: It may be advisable, in the absence of leucocytosis in pneumonia, to administer remedies which increase the number of white cells circulating in the blood. Pilocarpine, antipyrine, antifebrine and nuclein, may be regarded as such remedies, but I have had no opportunity to test their therapeutic value in this class of cases. An already existing leucocytosis in pneumonia may, however, be increased by the use of pilocarpine. In one case the number of white blood cells in one cubic millimetre of blood rose, in one hour after the hypodermic injection of 0.005 g. pilocarpine muriate, from 17,200 to 28,000, an increase of 62.7%.—*Centralb. f. klin. Med.*, No. 5.

**Palma (P.) on Syphilitic Disease of the Left Coronary Artery.**—Nothing was known of the history of the patient, a man thirty-nine years of age, who died of lobar pneumonia. There were an irregular cicatrized defect in the prepuce, cicatrices in the right groin, and orchitis gummosa of the left testicle. The heart was enlarged. The anterior wall of the left ventricle bulged out near the apex and was here very thin, and the muscle was almost entirely replaced by connective tissue. The descending branch of the left coronary artery was completely obliterated for 1 cm in length by connective tissue poor in cells. No fenestrate membrane could be seen here. Beyond this spot for a short distance the lumen was narrowed by granulation tissue lying within the *membrana fenestrata*.—*Prager med. Wochenschrift*, Feb. 10, 1892.

**Brannan (J. W.) on Essential Paroxysmal Tachycardia.**—Brannan found twenty-seven cases, including one reported by himself, which correspond to the picture given by Bouveret of the disease. The paroxysms may be long or short in duration. In the short attack, there is little noticeable except the extreme rapidity of the heart action, which may be 250 or 300 pulsations a minute. Pulse is usually regular, often not perceptible at the wrists. There may be moderate dyspnoea, anorexia, and constipation, and insomnia. No fever. Urine diminished, not albuminous. Sometimes there is epigastric oppression, præcordial pain, numbness of left arm, or general chilliness. The face is usually pale. The attack usually begins and ends abruptly, the pulse dropping to normal, and is followed by little prostration.

The long paroxysm (lasting more than four or five days) is much more serious, because of the secondary embarrassment of the pulmonary and general circulation. There are extreme cardiac distention—sometimes a soft systolic murmur,—congestion and oedema of the lungs, with cough, dyspnoea, bloody expectoration, and râles, and friction sounds; sometimes temperature owing to the pulmonary process; cyanosis of lips and cheeks; sometimes restlessness, insomnia or delirium; swelling of the liver and spleen, ascites and oedema; diminution of urine, which usually contains albumen and blood cells; diarrhoea; subjective sensations as in the short attack; sometimes attacks of syncope. At the end of the paroxysm, the cardiac distention rapidly disappears, but the heart remains irritable. The secondary symptoms disappear gradually. The paroxysms ended fatally in eight of the twenty-seven cases.

Over-fatigue, mental or physical, seems to be the chief cause of the affection. Excessive smoking, drinking strong coffee, and mental emotions are the factors.

The pathology is undetermined. Most observers believe that it is a pure neurosis; a temporary disturbance of the motor innervation of the heart, caused by excitation of the sympathetic, by a modification of the activity of the intra-cardiac ganglia, or by a temporary paresis of the vagus. In most cases it seems probable that there is a bulbar neurosis, confined to the cardiac centres of the vagus in the medulla. Post-mortem examination in two cases showed extensive development of fibrous tissue in

the wall of the left ventricle of the heart, and degeneration of the heart muscle.

The diagnosis of essential paroxysmal tachycardia is readily made in a well marked case, from Graves' disease, angina pectoris, organic lesions of the pons, medulla, or vagus. Reflex tachycardia is more difficult to exclude if there are present any gastric, uterine, or ovarian disturbances at the beginning of the paroxysm.

The prognosis is doubtful. Of the twenty-seven cases, eight died, two or three were cured, and the others remained liable to attacks.

Treatment is unsatisfactory. Absolute rest is necessary. Digitalis, sometimes efficient, fails in some cases. Morphine may arrest the attack; it always calms the patient. Electricity is sometimes of service, one pole being applied to the back of the neck, the other to the trunk of the vagus, or to the præcordia. Hygienic measures, avoidance of tea, coffee, alcohol, and tobacco, treatment of digestive disturbances or anaemia, are indicated to prevent recurrences.—*N. Y. Med. Record*, Dec. 12, 1891.

**Sansom (A. E.) on Difficulties of Diagnosis in Disease of the Aortic Valves.**—The group of cases of uncomplicated aortic insufficiency is to that of aortic insufficiency, plus mitral stenosis, as 88 to 39. But from the existence of the usual "aortic diastolic" murmur and of a presystolic thrill or murmur, or both, the presence of the two lesions cannot be inferred. Several cases are cited in which a presystolic murmur was present, but in which aortic insufficiency was proved, and mitral stenosis disproved, by post-mortem evidence. The differentiation between the two lesions in exceptional cases requires careful consideration of all the physical signs, and the evidence afforded by the cardiograph is of high importance. A case is reported in which from the clinical evidence it seemed probable that there was a conjunction of the two lesions, the mitral stenosis being slight. The autopsy showed aortic insufficiency; no mitral stenosis. Two explanations are possible: (a) the lifting force of the current of blood impinging on the under surface of the mitral curtain might so obstruct the current from the auricle as to create an impediment at the end of each diastole, or (b) the vibrations might be directly communicated by the regurgitant stream from the aorta to the mitral curtain.

A case is also reported in which the murmurs of aortic and mitral stenosis were present. The autopsy showed mitral stenosis, the thickened, calcareous material about the mitral orifice projecting so far into the conus of the ventricle as to constitute a real obstruction, although the aortic valves were normal.—*Liverpool Medico-Chirurg. Journal*, Jan., 1892.

**Vickery (H. F.) on Unsuspected Heart Disease.**—Reporting twelve cases in which heart disease had existed for considerable periods of time, although the patients were unconscious of the fact, and in some of which there were no symptoms suggesting heart disease to a physician, the author notes the necessity of thoroughness in the physical examination of every patient, so far as practicable. It is impossible to classify different lesions of the several cardiac valves as regards comparative prognosis. The prognosis of every case of heart disease must be decided independently. It depends on the degree of the lesion, its stationary or progressive character, the possibility of compensatory hypertrophy, and the condition of the myocardium. The crucial test for the heart is its ability to carry on the circulation. Given a defect in the valves, the degree of cardiac hypertrophy is, to some extent, a measure of the importance of that defect. If compensation is good, the less the hypertrophy the more favorable the case. The earlier the discovery of unsuspected cardiac disease is made by the physician and communicated to the patient, the better. This affords a fair chance for averting cardiac failure. A sensible patient, properly advised as to his physical limitations, may be able to lead a long, happy, and useful life, whereas unwarned he might soon collapse into hopeless invalidism.

The opinion was generally expressed in the discussion which followed the reading of this paper before the Section of Medicine of the Suffolk District Medical Society, that usually it is right and important to make to patients a careful and considerate explanation of the condition of the heart, but without exciting unnecessary alarm.—*Boston Med. and Surg. Jour.*, Dec. 31, 1891.

**Colleville and Bereaux on a Case of Chronic Infective Endocarditis.**—The patient was a puny girl, sixteen years old, without morbid antecedents, either rheumatic or choreic; had not had

any of the usual children's diseases, erysipelas, pneumonia, or any appreciable lesion of the skin or mucous membranes; was subject to epistaxis, bleeding from the gums, and coldness of the extremities. From earliest childhood the least exertion had been followed by severe oppression. The sternum was prominent, lips at times more or less slightly cyanosed, finger tips clubbed, and finger nails cyanotic. Heart action was violent and irregular; the apex at the sixth space, inside mammary line. There was an uncircumscribed systolic murmur at the apex, giving place at the median third of the præcordial region to a loud, harsh murmur, which was also audible over the spinal column. There were periods of improvement under treatment by rest and convallaria. An intermittent "whining" murmur appeared, respiration became embarrassed, the urine diminished in quantity, and anasarca developed. An attack of extreme dyspnoea was followed by death about ten weeks after she first came under observation. It was supposed that there was arrest of development of the interventricular wall near the base of the heart.

The autopsy showed a general anasarca, nutmeg liver, enlarged spleen, congested kidneys, compressed lungs. No infarctions could be found. The heart was large; pericardium was adherent. Luxuriant tufts of vegetation covered the mitral valve, and spread over the ventricular wall and aortic valves. The vegetations on the mitral valves were old and calcareous; those on the aortic valves were also rigid, but those on the ventricular wall, especially developed on the septum, were recent and soft. At the base of the vegetations were found colossal masses of micrococci.—*Union Méd. du Nord-Est*, Jan., 1892.

**Combemale and Lamy on a Case of Scarlatina Adenitis.**—A boy of six years, while desquamating after an attack of scarlatina, was attacked with pseudo-membranous pharyngitis. The glands of the left side swelled, and one, over which was a cicatrix, as it was suppurating anew, was opened. The glands of the right side swelled to a less degree. The false membrane disappeared from the pharynx, but the swelling on the left side of the neck increased to a great size and fluctuated. There was evening temperature, sweating at night, and diarrhoea, but operation was refused for ten days. Three hundred



grams of pus were then evacuated. Streptococci and staphylococci, the latter in large numbers, were found. The interesting fact is that tubes of agar-agar inoculated with the pus remained sterile, and a rat, into which was injected about two cubic centimetres of the pus, showed no trace of a purulent collection. Had the microbes secreted so large a quantity of toxins that their virulence had been at first diminished and then destroyed?—*Bulletin Méd. du Nord*.

**Ord (W. M.) on Clinical Aspects of Influenza.**—The pathognomonic signs of an uncomplicated case of influenza are not always the same. The most frequent are chills or rigors, followed by severe pains in the back, limbs, and head. The temperature rises rapidly to  $102^{\circ}$  to  $104^{\circ}$ . Most commonly, at this period, or a day later, catarrhal inflammation affects the conjunctivæ, nares, and respiratory tracts. Often the catarrhal symptoms are more marked than the pains. Less often there is catarrh, chiefly affecting the alimentary canal, with local pain, but little or no general pain. The temperature is in excess of the local symptoms. Complications may consist in excessive development of one or other of the symptoms characteristic of the disease, as excessive pain with indications of a deep affection of the nervous system, delirium, stupor, or increased rapidity of pulse or of respiration.

Another complication is bronchitis, deepening into broncho-pneumonia, usually not severe enough to prove fatal of itself, but accompanied by manifestations of a poisoning of the nervous system, inciting and surpassing the effects of the local lesion.

A complication may occur in the alimentary canal. There may be pain and oppression in the epigastrium, sometimes with vomiting and thirst, sometimes with tenesmus without diarrhoea. In a few cases there has been present severe vesical catarrh. Later complications may be enfeeblement of mental power and energy, tendency to return of pain, related with climatic conditions, fatigue, and anxiety, and return of intractable bronchial affections.

Complete rest and warmth, with the use of remedies applicable to the various forms of the malady, is the generally accepted treatment. For the pains, the author generally prescribes a mixture of sodium salicylate and ammonium bromide. For

treatment of the nervous symptoms morphine seems most valuable; strychnine, digitalis, ergot, and stimulants were less useful. Turpentine stupes were used with good effect. The isolation of the patient and the use of disinfectants is recommended.—*British Medical Journal*, Jan. 30, 1892.

**Meredith (H. B.) on Hypertrophic Cirrhosis of Liver.**—The history of the patient, a woman aged sixty-nine years, was negative, except that she had been fond of good living and accustomed to the use of alcoholic beverages. Her memory was faulty, but a history of ailing for two or three years and of jaundice for a year was obtained. She was much emaciated and very weak, deeply jaundiced, and liver was enlarged. Left leg was œdematous. There was no ascites. Bowels were constipated. She remained under observation seven months, becoming steadily more emaciated and weaker and more jaundiced. The liver steadily increased in size. Pains in the abdomen and extremities, and pruritus, and slight tympanites developed. Mild fever set in, and she passed into a typhoid condition. At the autopsy the liver was found to weigh seventy-six ounces, surface was smooth or finely granular, capsule was thickened and adherent, and there were evidences of old perihepatitis; on section it was hard, dense, and anæmic, and had the appearance of an extensive deposit of fibrous tissue evenly distributed throughout the organ. The gall-bladder was much enlarged, containing a little thin bile without concretions. Spleen was congested, weighing ten ounces. There was no evidence of gastritis or engorgement of vessels. No microscopical examination was made.—*Medical News*, Jan. 2, 1892.

**Bremer (L.) on Some Factors Contributory to the Development of Bright's Disease.**—B. draws attention to the dangers to which the patient of forty-five years of age or thereabout, suffering from the beginning symptoms of Bright's disease—"nervous prostration," etc.—and mistaking them, is liable when adopting means to combat them. Hunting and fishing expeditions in wild regions are especially objectionable. The middle-aged Brightic, who has led a regular, indoor life of comfort, is not fitted to undergo the vicissitudes of weather, the irregularity of meal time, unhygienic cooking, the ex-

clusive fish or meat diet, and the physical exertion of camp life. This is especially true when there is arterio-capillary fibrosis. The indiscriminate use of mineral waters and hot baths, and the improper cooking frequent in hotels, are dangers met at watering-places.

To meet these dangers early diagnosis is necessary. Rest, an equable temperature, and a diet not too restricted, but rich in starches and fats, and the judicious use of the iodides, are recommended as the proper lines of treatment.—*Med. Fortnightly*, Jan. 15, 1892.

**Crothers (T. D.) on the Opium Disease.**—The paper, which opens with a protest against the use of the word *habit* in describing the opium disease, discusses some recent facts which throw light on its etiology. Clinical studies have insufficiently investigated the question of etiology.

A large proportion of opium cases have inherited a neurotic diathesis. In some cases there is present an opium diathesis, or a special inherited tendency to use opium. In all neurotic cases the use of opium, when given, should be concealed and watched with care.

In another class of cases abnormal nutrition seems to be the most active etiological factor. Imperfections of digestion, assimilation, and elimination of waste products, and the resulting auto-intoxication, produce an array of mental, nervous, and digestive suffering, for which opium is a specific paralyzant. In a third class, the use of opium may be dated from an injury or disease.

Routine treatment, either by slow or rapid reduction of opium, is not wise. The removal of opium is not the cure. The substitution of other narcotics is unwise. Where an opium or neurotic diathesis exists, the opium should be withdrawn very gradually. Rapid reduction and heroic treatment are never permanently successful. Attention should be given to brain and nerve nutrition. Great care is needful in using other narcotics to lessen irritation during withdrawal of this drug. Foods and tonics should be given. The same general treatment as for neurasthenia is required.

In the second class of cases treatment is very hopeful. A long preliminary course of baths, mineral waters, and tonics should precede the removal of the opium. Then the opium may be removed at once, with-

out the knowledge of the patient. In the third class the opium may be removed rapidly or diminished slowly, and discontinued, or, in some cases, should not be altogether removed.—*Journal of the American Med. Association*, Feb. 20, 1892.

**Davison (J. T. R.) on Tracheal Tugging in Aortic Aneurism.**—Two cases are reported in which the diagnosis of aneurismal dilatation of the arch of the aorta was made from the history and physical symptoms of the patients, and in which tracheal tugging was present. The author remarks on the diagnostic importance of this sign, which is obtained by taking hold of the cricoid cartilage and gently pressing it upward—the patient's neck must be extended and mouth closed—a distinct downward "tugging" of the trachea with each cardiac contraction is then perceived.—*Lancet*, Dec. 26, 1891.

**Jones (A. A.) on Pneumothorax Following Abortion.**—The patient was found in a condition of shock, with intense dyspnoea and slight cyanosis. A few days before, she had had an abortion, followed by chills and fever. Examination showed pneumothorax of the right side. A steady volume of air was aspirated but without giving relief. The patient died a few hours later. Autopsy showed septic endometritis; a septic thrombus of right uterine vein, extending into the ascending vena cava; hemorrhages, and a small infarct in the left lung. The right pleura was full of foul-smelling air, the lung was collapsed, and in the anterior border near the surface was a small abscess-cavity which had ruptured into the pleura. A portion of exudate over the rupture acted as a valve, preventing the return of air from the pleural cavity.—*Medical News*, Dec. 12, 1891.

**Good (J. W.) on Passage of a Renal Calculus by the Bowel.**—The patient, male, thirty-five years old, suffered during several days with characteristic symptoms of renal colic, indicating the presence of a calculus in the right ureter. Energetic treatment gave only partial relief. The symptoms then abated to some extent, and a tender spot appeared in the course of the right ureter. Fifteen days after the beginning of the attack the pain ceased and the tenderness diminished; fecal matter was discharged in the urine, and the stools presented a urinous odor; starch appeared in the urine after starch enemata. Cystitis

developed, and there was severe tenesmus. After persisting several weeks the symptoms of recto-ureteral fistula disappeared.—*Medical News*, Feb. 27, 1892.

**Martin (E. H.) on Malarial Hæmaturia.**—This condition, to which M. would give the name *Lysæmia*, occurs only in persons suffering from chronic malarial toxæmia. Their blood has deteriorated, and has a tendency to disintegration of the red corpuscles. The walls of the capillaries are weakened by malnutrition, and local increase of blood pressure, such as occurs in the internal organs during a chill, is followed in the kidney by choking up of the tubules with disintegrated corpuscles. Hæmaturia and suppression of urine follows, and unless speedily relieved, coma and death supervene. Quinine is useless or injurious. The indications for treatment are: 1. to clear up the urine; 2. to evacuate the bowels; 3. to repair the blood and blood-vessels; 4. to administer an antimalarial which will not interfere with the other indications. The first indication is met with turpentine, ten drops every four hours; Epsom salts supplies the second; the third is met with nourishment, mainly milk and iron; for the fourth, arsenic is preferred.—*New Orleans Med. and Surg. Jour.*, Dec., 1891.

**Boyd (M. A.) on Enteric Fever and its Treatment.**—In the autumn the con-

ditions are favorable for infection. The bacillus of Eberth is found growing more luxuriantly, and so presumably more virulently, then, and the intestinal canal is in a weakened condition, as is shown by the prevalence of gastro-intestinal catarrh. The glandular tissue is first overcome, because it is endowed with very poor vitality, and has little power of resistance or repair when infiltrated or choked from any cause. The process affecting the glands, as far as the typhoid bacillus is concerned, is over in fourteen days. After that the suppurative micrococci appear, and with their peculiar toxins produce the special symptoms and temperature after the first fortnight of the disease. Enteric fever may be regarded as the result of the growth of the two sets of micro-organisms.

Antiseptic treatment will not abort a case of typhoid, once the characteristic fever has begun, but it will prevent, in the majority of cases, the septicæmic phenomena. A suitable antiseptic must be thorough, disinfecting the contents of the bowel and permeating the intestinal wall. Gases are readily absorbed. B. prefers chlorine in alkaline solution. There can be no doubt that this treatment makes the type of the disease milder, and in over a fourth of the cases, when begun early, brings the febrile process to an end about the fourteenth or sixteenth day.—*Practitioner*, Feb., 1892.

## FURTHER REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

**Atkinson (I. E.) on Bradycardia in Acute Rheumatism.**—The writer calls attention to the fact that it is during convalescence from, and not in the course of rheumatic fever, that bradycardia has been encountered. When thus occurring it usually has its origin in a cause common to convalescence from a number of acute febrile disorders. This cause, according to Traube's theory, is not any specific rheumatic influence exerted on the heart, but rather a heart exhaustion leading to a slowing of action. But there are other factors in the question which militate against the universal application of this theory. This exhaustion is noticed in convalescence from various acute febrile disorders. Were this true of all cases, bradycardia, arising after rheumatic fever, would not especially interest us; but while,

in fact, it does occur in most cases after defervescence, and during convalescence, it certainly does not so occur in all. Bötticher reports 26 cases of bradycardia among 294 cases of articular rheumatism. At the time of the appearance of the bradycardia, nearly all patients were without fever, but in some cases febrile movement persisted even when the pulse was clearly slowed. The phenomenon has been encountered both when rheumatic cardiac complications were concurrently detected as well as when such changes could not be recognized.

Atkinson gives full clinical histories of two cases of acute rheumatic fever, in the course of which bradycardia was developed, and reviews the literature of the subject. His own views as to its causation are expressed as follows:

1. Bradycardia is observed rarely during the active stage of acute inflammatory rheumatism. It occurs with greater frequency during convalescence from this disease.

2. When it occurs during convalescence, in most cases, probably, it is identical with bradycardia following acute febrile diseases of widely different nature, and directly the result of the febrile action itself upon the innervation or musculature of the heart.

3. When it occurs during the active stage of rheumatic fever it probably depends upon endocarditis, or pericarditis, or myocarditis (primary or secondary, by extension), whereby the inhibitory nerves of the heart are implicated, and consequently stimulated. Even where the physical signs of cardiac inflammation are absent, bradycardia, occurring during the acute stage of rheumatism, may be secondary to undetected myocarditis stimulating the vagus nerve.

4. It is possible, but exceedingly improbable, that this symptom may follow the action of the rheumatic *noxa* upon the cardiac muscle or nervous system directly.—*Va. Med. Month.*, Dec., 1891

**Duckworth (Dyce) on Gout of the Penis.**—The patient was a man, aged forty-two, a glass cutter, admitted into St. Bartholomew's Hospital with gouty arthritis, involving several joints, including those of the great toes. There was moderate pyrexia. No waste deposits. The patient had been discharged from a cavalry regiment twenty years previously on account of hernia. Since then he had led a sedentary life, and drank about two pints of beer daily. Sixteen years ago he suffered from lead colic. He was occasionally subject to attacks of articular gout, and inherited the disease from his father. Five days before admission he was awakened by sudden pain in the right wrist and right great toe-joint. The following day he awoke with pain in, and firm erection of, the penis. This continued up to the time of admission. Three days later the left great toe-joint was attacked by gout. The various thoracic and abdominal organs were found healthy. The urine was acid, specific gravity 1022, and void of albumen. The penis was erect and tense, distressingly painful and turgid. No points of hardness were found in its course. The testes were natural. There was no pain or

swelling in the perineum. The temperature varied from 99° to 102°. Aperients and salines with colchicum were administered, and a light diet. The priapism persisted steadily, uninfluenced by internal treatment, by sedative suppositories, or lead and opium lotion. A cage had to be placed over the abdomen to prevent impact of the bedclothes. Micturition was painful, and a soft catheter had to be passed. From time to time fresh articular attacks of gout occurred in various joints, with slight rises of temperature. Priapism persisted for twenty-one days without intermission, and gradually subsided with general amendment of all the symptoms. The noteworthy points in the case were, first, the gouty inheritance; secondly, enforced sedentary habits, with exposure to lead impregnation, and the habitual drinking of beer. While acute gouty inflammation was shown to be not infrequent in the bladder, prostate gland, and testes, gout of the body of the penis in this acute form was practically unknown, and the author had never heard of a similar case. The pathology was believed to be thrombosis of veins in the corpora cavernosa, with some inflammatory condition of the trabecular structure, return of blood being mechanically prevented during the blocked condition of the parts. Smaller thromboses of this nature had been previously noted, but not leading to painful persistent priapism, and entailing the presence of small knots readily perceptible in the body of the penis, which slowly or imperfectly disappeared. Priapism was sometimes met with in elderly men as the result of a very acid condition of the urine, and was readily removed by alkaline treatment. The author classified the condition described as amongst the rarer forms of gout, of which gouty parotitis was another example.—*British Med. Jour.*, Jan. 16, 1892.

**Beale (G. B.) on Fatal Rupture of an Ovarian Cyst in an Infant.**—On October 23d the author was called to see an infant six weeks old, whose sister, four years old, had died from typhoid fever about a month previously, the fatal termination being caused by perforation and peritonitis. The infant's temperature was 101°, the abdomen swollen and hard; the mother felt convinced it had typhoid fever, but the symptoms did not seem to indicate that. The temperature gradually

rose to  $103^{\circ}$ , and obstinate vomiting set in; the abdomen getting more and more distended and harder, he came to the conclusion that the child had peritonitis, but was much puzzled as to the cause; it died on October 27th. He made a post-mortem examination on October 28th. The body was well nourished, there was slight umbilical hernia, the intestines were greatly distended and almost empty (the vomiting having been constant for forty-eight hours); there was no morbid change in Peyer's patches, but a good deal of purulent fluid in the peritoneal cavity, deposit of caseous lymph over the right side of the liver, but none on the bowels. On passing a finger down into the pelvis pus welled up, and on removing the uterus and appendages, cysts were found in both ovaries the size of a filbert; that in the left was ruptured in removing, the walls being very thin; on the right side the cyst wall was tough and translucent, and attached to it were the remains of a ruptured cyst with a small quantity of blood and caseous debris. The spleen was normal; the heart healthy and filled with decolorized clot; the lungs showed hypostatic congestion. The peritonitis appears to have been the result of the rupture of this ovarian cyst, which seems remarkable in a child six weeks old.—*British Med. Jour.*, Dec. 12, 1891.

**Eastwood (D. J.) on a Remarkable Case of Gangrene of the Leg and Lower Part of the Abdomen.**—I was called on Wednesday, June 24, 1891, to see M.C., a young man twenty years of age. The patient was suffering from an attack of remittent fever, and had been ill for four days. The temperature ranged from  $101^{\circ}$  F. in the morning to  $103^{\circ}$  at 4 in the afternoon, until Friday, 26th, when it was normal. Saturday morning his temperature continued normal, and he expressed himself as feeling so much better that he desired to get up and dress himself. About twelve o'clock the same day, I was summoned in great haste.

Upon arriving I found the patient in great agony, from pain in the dorsum of the foot and calf of the leg. The foot was excessively anæmic, the circulation having been almost entirely cut off. No circulation could be detected in the popliteal artery. Sensation and warmth were almost absent up to the ankle joint.

No evidence of any external violence

could be found, nor could an aneurism of any vessel be detected. No history of syphilis was given, and the young man previous to his attack of malaria was unusually healthy. Priding himself upon his physique, he took plenty of open air exercise, and had well developed limbs.

On Saturday evening the temperature rose to  $105^{\circ}$  F. and the pulse to 130 and 150. Mortification was evident on Monday morning, and by ten o'clock had extended to the knee. Upon palpation crepitation was discovered as high as Poupert's ligament. By six o'clock P.M. Monday the blackness had extended within about three inches of the hip, and it was evident that decomposition had involved the entire leg and thigh.

On Tuesday morning gangrene had extended up and invaded the abdomen and genitals, the testicles having swollen to an enormous size. Death relieved the sufferer at eight o'clock A.M. upon this day.

At no time was there any evidence of a line of demarkation, and as there was no circulation in the femoral artery on Monday morning the attending surgeons thought it worse than useless to amputate. Now it is evident that the cutting off of circulation in the popliteal and femoral arteries caused the gangrene. But what caused the clot in the vessels, that did the damage, is the question. The treatment comprised warm applications and friction locally, and antipyretics and stimulants constitutionally. By this treatment it was thought that collateral circulation could be established and the limb saved.—*Internat. Jour. Surg.*, Nov., 1891.

**Martin (Z. T.) on Strongylus Gigas.**—The patient was a man aged forty years who, on coming under observation, was passing blood from the bladder. The latter was emptied with difficulty with the catheter and subsequent syringing. The strangest thing in this case happened on the eighth day, viz.: the passing of *two worms* through the catheter. One was 7 inches long and the other 15 inches by actual measurement. After their passage the hemorrhage ceased almost instantly "as if by magic," although there had been a perceptible diminution for two or three days. These worms or entozoa were of a dark-red or brown color, and about the size of a small rye straw or large knitting-needle, somewhat resembling the ascaris lumbricoides found in the intestines. They

are distinguished from the common round worm by their red color, which is, however, apparently due to the sanguineous fluid in which they are bathed.

According to Roberts the worm is called the strongylus gigas. He says the male measures from 10 to 15 inches in length, while the female has sometimes a length of over a yard. He says this worm is peculiar to the kidneys and urinary passages, and is rarely found elsewhere. It inhabits weasels, the mink, and has been found in the dog, wolf, horse, ox, and some other animals, but is of extreme rarity in the human subject. Of the seventeen alleged cases collected by Davaine he only classes seven as even probable instances, and further adds that there are none of recent occurrence (unless mine be one). Davaine says: "It is evident of the alleged cases, a few were really examples of lumbrici which had penetrated into the urinary passages from the intestines."

The lumbricoid has only three oral papillæ, while the strongylus has six nodules or papillæ.—*Kansas City Med. Index*, Oct., 1891.

**Webb (J. H.), on Hydatid of the Femur.**—A man, clerk, aged twenty-six, was supposed to be suffering from sarcoma of the femur so high up that amputation was out of the question. He had had typhoid fever five months before. After his recovery he suffered severely from pain over the trochanter of the left femur. He next noticed that his thigh began to swell, and his doctor pointed out to him a localized, well-defined tumor bulging over the spot where he experienced his chief nocturnal pain. On examining the patient the swelling or tumor alluded to was very perceptible, but the enlargement of the thigh had evidently gone, for the left leg appeared to be, if anything, smaller than the right. The tumor, which was about the size of half an orange, was tender, though not very much so, to the touch. It appeared hard, and without fluctuation. Against its being of malignant nature was the fact that the veins were undistended, and the tumor had evidently increased but very little of late. It suggested itself to the writer that there might be an abscess, and though he inclined very much to this latter opinion, still the sense of fluctuation, if any, was very obscure. It was determined after anæsthetizing the patient to make a free incision into the tumor. This accord-

ingly was done, and on reaching the bone, and penetrating the cavity, the escape of a hydatid cyst at once revealed the nature of the tumor. When all the loose bone was removed, and the whole of the great trochanter, with quite four inches of the shaft, had become detached from the femur, it was found that the parasite had involved all but a thin shell, which connected the head with the middle of the femur. A large number of cysts escaped, perhaps some two or three hundred in various stages of development and degeneration. There was no appearance of a mother cyst, and this is usually the case when the habitat of the hydatid is in bony tissue. The periosteum seemed involved, though probably some portion of the hydatid fluid had escaped between it and the bone it covered. Hence the obscure feeling of fluctuation just mentioned. The wound was dressed antiseptically, without attempting to place the leg on a splint, as it was feared that had an effort been made to stretch the thigh on the pelvis, the femur might accidentally have been broken. A good recovery eventually took place.—*Australian Med. Jour.*, Nov. 15, 1891.

**Sympson (E. M.), on Accidental Cow-Pox.**—The patient was a farmer's wife who was accustomed to milk the cows. One of the latter became affected with pimples on the teats and udder; these formed blisters, which burst while milking was proceeding. The teats became swollen and very tender; then scabs, dark red, or almost black, appeared on the sores, and when these fell off scars were evident for some time. The second cow was attacked about a week after the first. I saw both the infected cows at my first visit—that is, about four weeks and a half after the beginning of their illness. Then the teats of one cow had five or six oval scabs or crusts, in size between that of a sixpence and a shilling, very hard and reddish-brown in color. The teats were then about their natural size, but were still very tender. When one of these crusts was removed the sore beneath was rather deep and conical, and rapidly filled with seropurulent fluid. The sores on the second cow's teats had much the same appearance, though in one or two places there was more of a vesicular aspect, with a firm, raised, and hard edge.

The history of the patient's illness is shortly as follows:

She had been milking the cows for three or four days, as her husband was very busy, and on April 3, 1890, as she was bringing some firewood, she scratched or pricked rather deeply the second finger of her left hand. On Sunday, April 6th, she noticed at the place of the thorn-prick a small hard and painful pimple. Next day, April 7th, the finger began to swell and the pimple enlarged. On Tuesday, April 8th, she was rather feverish, and had one or two slight rigors. The place became more and more painful. I first saw her on Wednesday, April 9th. The wound was then about the size of a silver penny-piece, raised and very firm, whitish in color, with a vivid blush all round, and extending up the finger nearly to the hand, which was swollen. As she then thought there might be a portion of the thorn embedded in the place, and before I had heard any of the history of the cows I incised the part; but no pus came away, only some blood and serum. It was exceedingly tough to cut into. On April 10th it was forming more into a large vesicle. The forearm was swollen, with reddened lines of lymphatics running up to the gland at the bend of the elbow, which was enlarged and tender. Her temperature was  $103.6^{\circ}\text{F}$ ., her tongue was coated, and she had severe headache and nausea.

On April 11th her arm had commenced to swell; it was tender, very red, and full of tingling, and the axillary glands were large and painful. Her temperature was  $104.2^{\circ}$ , pulse 110. All this pain and swelling of her arm she was inclined to attribute to her having eaten some pork recently, as whenever she did so she almost invariably suffered from severe outbreaks of urticaria of an erysipelatoid character; and probably this tendency of hers did give more prominence to the cutaneous affection which originally was due to the vaccination. On April 12th she was decidedly better, her temperature being  $102^{\circ}$ , her pulse 96. The swelling of her arm had gone down, the glands much smaller, and the hand was not so swollen. The inoculation place had now exactly the appearance of a five-days' old vaccination mark.

On April 13th she was much better all round. On the 14th her arm was very nearly of its natural size; the forearm also had lost its pain and tenderness; the inoculation was about as large as a four-

penny-piece, still very firm, especially at the edges, which were raised, while there was a slight depression in the middle. Her temperature was  $99.4^{\circ}$ , her pulse 86. The appearance of the place is fairly accurately represented in the accompanying rough sketch. The constitutional symptoms soon disappeared, and by the end of the week the characteristic "tamarind-stone" crust had formed on the wound.

About three months afterwards the scar was very evident, looking in every respect like an ordinary vaccination mark. A week ago—that is, nearly twenty months after the inoculation—the scar had faded considerably, and was very nearly the same color as the surrounding skin. One particularly interesting point about my patient must not be forgotten: she had not been vaccinated since her infancy—she is now about thirty-five,—and I could discover no mark whatever of that vaccination.—*British Med. Jour.*, Jan. 16, 1892.

**The Diagnostic and Prognostic Value of the Observation of Tubercle Bacilli.**—This topic was discussed at a recent meeting of the Medical Society of London. Dr. F. J. Wethered said that, after trial of several methods of staining, he had always reverted to the Neelsen-Ziehl process—that is, staining in a carbolic acid solution of fuchsin, and decolorizing in a 25 per cent. solution of sulphuric acid. The chief points to which attention should be directed to procure successful results were: to select the early morning sputum; to pick out the small opaque particles; to stain two minutes in the heated stain; to take out thoroughly the red stain with the acid, a quarter of an hour not being too long, although a minute was usually sufficient; and, finally, to counterstain in methylene blue. Roughly speaking, the presence of tubercle bacilli was absolutely diagnostic of a tuberculous process proceeding somewhere in the respiratory tract. In cases in which the history and physical signs were not clear enough to warrant a diagnosis of tubercle, a bacteriological examination was of great value, especially when phthisis was masked by bronchitis or emphysema. In obscure laryngeal cases it was also of value, as the diagnosis from syphilis might thus be established. A negative result did not by any means absolutely exclude phthisis, even though several examinations of the sputa were made. As regards prognosis, he had come to the con-

clusion that little could be learned from the number and distribution of the organisms. The general aspect of the case was a surer guide. He had sometimes found bacilli to be very few when the disease was progressing rapidly, and to be very numerous when the patient was recovering. Examination of unstained specimens would often assist in diagnosis, and the fragments of elastic tissue ought to be carefully sought for.

Dr. Hadley insisted upon the importance of using only new slides. He had detected stained bacilli on slides that had been very carefully washed in potash and acid, also on the objective of microscopes. Admitting the prognostic value of the presence of elastic tissue in the sputum, he said he found it less easy to discover than the bacillus.

Dr. S. Mackenzie observed that Dr. Klein, on the discovery of the bacillus, had examined some specimens of lungs that had been in pickle for many years, containing nodules, some of broncho-pneumonia, some of the typical gray tubercle. Curiously enough, the bacilli were numerous in the former and rare in the latter, a result since confirmed by the experience of others. He remarked that certain authorities regarded the presence of the bacillus as an epiphenomenon, and not as a necessary feature of the disease.—*British Med. Jour.*, March 5, 1892.

**Dixon (S. C.) on Tubercle Bacillus.**—Believing it advisable to demonstrate the presence of tubercle bacilli wherever existent, I first showed them to be present in the dust found in public conveyances. This brought about the orders from the street railway companies forbidding spitting on the floors of their cars. The result of this is that the great masses of tuberculous and tobacco sputum on the floors of our public conveyances in our large cities are fast becoming a thing of the past.

This will reduce the number of bacilli thrown into the air by the motion of ladies passing in and out of the cars.

At another time I obtained tubercle bacilli from off the tooth-brush of a tuberculous inmate of the University of Pennsylvania Hospital.

This demonstration may, and I hope will, serve to warn our people of the danger from standing several tooth-brushes in a common family tray. One from a tuber-

culous person, in close contact with another, belonging to a person in health, under such conditions as we often find on wash-stands, there is no reason why the chances are not quite as good for the brush used by the person in health from having tubercle bacilli rubbed on to its bristles from the fertile brush, as there was of my cover glasses over which I brushed the contaminated bristles to prove the presence of the bacilli. When the micro-organisms are once placed on the brush, we can quite readily conceive a person with a lacerated gum inoculate him or herself by cleansing the teeth with the brush so poisoned. Lately the long dress trains worn on the streets by our ladies suggest another way to carry tubercle and other bacilli into our houses. In walking along the streets we constantly see a dress wipe up portions of sputum from our pavements and floors of our railway stations. *From one of these dresses dragged over the streets, a few times, I was able to demonstrate the presence of seven tubercle bacilli on an inch microscopic slide on which a little dirt off a dress was dusted.*

Knowing, therefore, that these long dresses have dried tuberculous sputum, containing tubercle bacilli on them for the maids to dust off in our ladies' dressing-rooms, most of which are poorly ventilated, we can quite understand how a sufficient number of bacilli, and possibly spores, can be collected in small compartments to an extent dangerous to at least those predisposed to tuberculosis.—*Times and Register*, March 5, 1892.

**Turner (J. B.) on Successful Treatment of Membranous Croup without either Tracheotomy or Intubation.**—The class of cases to which I refer are of laryngitis with fibrinous exudation and not complicated by diphtheria. My experience before February, 1891, covering a period of nine years, was to have treated medicinally eight cases, six of which died, showing a mortality of 75 per cent. I condemn tracheotomy and intubation in true croup, as the same objections obtain in both, viz., that the accumulation of muco-pus in the lower part of the trachea and in the bronchi is lost sight of. Paralysis of the posterior crico-arytenoid muscles, preventing dilatation of the glottis in inspiration, is a symptom no doubt relieved by tracheotomy and intubation, but the other paramount elements of danger in the case,



as pneumonia, capillary bronchitis, accumulation of muco-pus, feeble expiratory efforts preventing expectoration, due to general debility and exhaustion, are *unremedied*.

The treatment I have used since February, 1891, is based upon the allaying of inflammation about the site of the membrane, effecting the separation of the membrane, lessening the formation of new membrane, effectually controlling laryngeal spasm, and sustaining the strength. I use *asafœtida* by suppositories to allay spasm and to give needful intervals of quiet, restful sleep, and consider it a valuable and much overlooked remedy in membranous croup.

For the other conditions or symptoms I used ammonium chloride, given in syrupy mixture without water, as the addition of water makes it unpalatable to children.

For a child eleven months old the following prescriptions are ordered :

R. Ammonii chlorid.,	3 j	
Syr. toltan.,	f 3 ij	M.
SIG.—Half a teaspoonful every two hours.		
R. Asafœtidæ pulv.,	gr. xvj	
Quinina sulph.,	gr. iv	
Codeinae,	gr. ss	
Olei theobromæ,	gr. cxxx	M.
Fiat suppos. No. viij.		
SIG.—One every four hours.		

Four cases of recovery are reported.—*College and Clinical Record*, March, 1892.

**Wilcox (R. W.) on Endarteritis Proliferans Chronica.**—This condition may be localized in one or two organs or diffused over the whole body. It has been observed in a child five months old, but is most commonly met with after middle life. Hemorrhage (epistaxis-cerebral or retinal) is usually the first symptom—later come oedema, vertigo, and heart changes.

The lungs are often the first organs to call attention to the arterial condition. It may appear as a bronchitis with or without râles, or as a chronic catarrhal pneumonia, as an acute illness, or so slowly and gradually that they excite no attention though the lung be the seat of extensive pneumonic consolidation.

The blood-vessels of the liver and spleen are also subject to this proliferation of their intima. Vascular changes in the former organ will be manifest by disturbances in its function, but as the spleen cannot by any recognizable symptoms demonstrate, we can but speculate as to its existence. The effects on the nervous system are

shown in muscular weakness, nervousness, irritability, mental decline, sleeplessness, and hyperæsthesia of the skin.

**Prognosis.**—Unfavorable so far as complete removal of the proliferated intima is concerned.

**Treatment.**—Various drugs have been used in this affection with indifferent success. Those which appear most efficacious are bichloride of mercury, carbonate of ammonia, and iodide of potash. Digitalis has been recommended in conjunction with the ammonia salt. The treatment must be prolonged and uninterrupted.—From lecture reported in *St. Louis Med. and Surg. Jour.*, March, 1892.

**Van Allen (H. W.) on a Case of Congestion of the Lungs; Treatment by Phlebotomy.**—A. A., aged nineteen years, single, Canadian, a laborer, of good previous health, employed at the hospital. He was thoroughly drenched in a rain storm during the evening of January 18, 1891. I saw him at 11 P.M., when he complained of nothing. At 7 A.M. the next day I was called to see him where he had been found in bed, gasping for breath, by another employee. He was removed to one of the wards for examination and treatment. His efforts were given so entirely to respiration that the subjective examination was limited. It was as follows: Severe pain over the heart, constant and cutting in character; cough absent; no expectoration. He said he had had a chill at 3 A.M. Objective examination: Temperature, 98.2° F.; pulse, 76, full and bounding in character; respirations, 52 a minute; nervous system unaffected. Examination of the chest: (a) Inspection: Form, normal; respiratory movements very labored and shallow and at times of the Cheyne-Stokes character; the apex-beat of the heart was in its normal place and very strong; the veins in the neck were pulsating. (b) Palpation: Vocal fremitus normal. (c) Percussion: No dullness; at least the same on each side. (d) Auscultation: Subcrepitant râles, especially over the left chest; vocal resonance normal.

Examination of the abdomen was negative.

The patient grew worse rapidly. In an hour the respirations at one time would reach 76 a minute and at others would cease entirely, so that it was needful to stroke the chest with a wet towel and use artificial respiration. Death seemed almost

unavoidable. It was decided to do phlebotomy. The relief from the abstraction of four ounces of blood was almost immediate, as the patient thought he was entirely cured. He laughed with the attendants and complained of being hungry. Later, as his heart showed some signs of weakness, he was ordered ten grains of ammonium carbonate at hour intervals, but it was soon discontinued. The paroxysms of dyspnoea increased again in severity and frequency until it became needful to abstract four ounces more of blood, with a repetition of the former result. Later there was a return of the dyspnoea with lessened severity. Hypodermic injections of an eighth of a grain of morphine with one two-hundredth of a grain of atropine were given with good results. These were continued during the night.

During the next two days the dyspnoea gradually decreased. All physical explorations of chest were negative, and at no time did his temperature rise to 100° or his pulse to 90. A two-by-three-inch blister had been drawn over the heart.

On January 21st the patient began to expectorate large quantities of thin, bloody fluid. From this time he made an uninterrupted recovery, and was able to resume his usual occupation in a week from his time of admission.—*N. Y. Med. Jour.*, March 19, 1892.

**Whitney (W. F.) on Fat Embolism.**—The author records a case of comminuted fracture of the femur with death on the fourth day. No cause therefor could be found on autopsy except the condition of the lungs, which were partly retracted, the upper lobes dry, the lower lobes of a dark bluish color, and considerable dark thin fluid escaped from the cut surface. There was no evidence of consolidation anywhere. Microscopical examinations showed the small vessels extensively plugged with a highly refracting fluid substance (fat).

He then reviews the general subject, going back to Magendie's experiments in 1827. Magendie's clinical picture of the condition is as follows :

- (1) Certain proof of periodic occurrence of fat in the urine.
- (2) Transitory attacks of dyspnoea.
- (3) At times occurrence of slight hæmoptysis without fever and usually without dulness or râles.
- (4) Diminution of temperature.

(5) Irregular action of the heart.

(6) Collapse, with extreme pallor of the skin, and mucus, at first shallow, respiration, at times broken by a deep sighing inspiration, later, Cheyne-Stokes' phenomena.

(7) Spasms of different kinds or paralyzes, which in the experiments were usually bilateral.

(8) Diminution of reflex irritability.

Whitney does not think that according to this standard the fat embolism was the sole cause of death in his own case, though nothing else could be discovered.

The two important points brought out by the above consideration, are :

(1) On the clinical side, that the urine of patients with fracture should be carefully watched from the second to the fourth day for the presence of free or emulsified fat.

(2) On the pathological side, that unless found in the brain the cause of death cannot surely be ascribed to fat embolism.—*Bost. Med. and Surg. Jour.*, Feb. 18, 1892.

**Struthers on Rider's Bone.**—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Struthers exhibited a specimen of rider's bone. This preparation, Dr. Struthers said, was the one he had shown in London at the Anatomical Society of Great Britain and Ireland in November, 1887. He thought it would be interesting to the members of this society to see a preparation of so rare a condition. A case had been recorded by Mr. Birkett (*Guy's Hospital Reports*, 1868), and one by Mr. Bryant (*Practice of Surgery*, 4th edition, 1884), in both of which the condition appeared to have had its origin in some rupture in the region of the adductor muscles during violent action on horseback. For this preparation he, Dr. Struthers, was indebted to his former pupil, Dr. James Allan, of Leeds, by whom the dissection as it now stands was made. It was from a man aged fifty-five. The bone of each side is about  $1\frac{1}{4}$  inches in length,  $\frac{3}{4}$  to 1 inch thick, and mostly triangular. Right bone articulated to a projecting platform at the angle of the pubes by a diarthrodial joint with very irregular surface. This bone was felt to be movable from side to side during life. Left bone immovably attached to the pubes. The muscular attachments are still seen on the left side. Adductor longus tendon directly prolonged from the end of the bone, which is flattened towards the

tendon; attached to inner surface, on to the point, the fascia lata; to inner posterior border, fore part of gracilis; to outer side, inner part of pectineus; behind, a large part of adductor brevis. All these muscular attachments are of full size. But, curiously, in regard to the origin of the ossification in this case, the man would seem not to have been a rider. Dr. Allan mentions that "he had been a foot soldier for twenty-one years, but I have no note of his having been much on horseback in any capacity."—*Edinburgh Med. Four.*, March, 1892.

**Gottheil (W. S.) on the Spread of Syphilis by Cigars.**—The writer reports the cases of two girls with distinct syphilitic lesions who were employed in cigar factories as "finishers." They used to bite off the ends of the cigar wrappers, using the saliva to shape the tips. Gottheil calls attention to the manifest dangers in this process. He is not aware that specific disease has actually been communicated in this way. It is possible that the tobacco leaf and tobacco juice in the mouth may render the contagious element innocuous. But it is also possible that the long period of incubation of syphilis has rendered it impossible to trace a source of contagion so unnoticeable. It remains a fact that upon every single cigar tip of the thousands finished by these two operatives there was probably deposited a portion of the virus of the disease. Moreover, the practice of using the teeth and saliva in the manufacture of an article which is destined to be taken into the mouth is not without serious objections entirely apart from considerations of disease.

It will probably be impossible in the future, as it has been in the past, to stop this unclean and dangerous method of cigarmaking by pressure put on the operatives themselves. The saving time and trouble is so great as to outweigh every other consideration.—*N. Y. Med. Four.*, March 19th.

**Death by Falling.**—Of late years a considerable, and perhaps a disproportionate, amount of attention has been devoted to the scientific explanation of the state of unconsciousness. The public, as well as the professional, mind has been treated *ad nauseam* to discussions on hypnotism. The relations of trance and sleep to each other and to various phases of disease have elicited their share of logical ingenuity and

of research. Quite lately again an allied condition—that of the numbed sensation consequent upon shock, such as that experienced in falling from a height—has attracted attention, though, beyond the assurances of some who have survived this experience that dread and pain are alike absent, we have no certain proof of the existence or the essential character of this merciful torpor. According to Professor Heim of Zurich, who has devoted much time and thought to the investigation of the subject, the sensations at such a time of the sufferer, if so he can be termed, resemble somewhat those of drowning persons. In place of pain there is a process of rapid and involuntary mental activity, succeeded by stupor; series of old memories fly past the mind like scenes in some rapid vision, and life is revised, as it were, on the threshold of death. One is naturally tempted to inquire what is the explanation of this extraordinary state, in which the final catastrophe appears to be lost in the dream-slumber preceding it. The preoccupation of rapid cerebration, a species of shock in itself, might furnish a clue to the mystery—at all events, as regards the abolition of pain and fear. We cannot help thinking, however, that other causes must be operating along with this, which at first presents itself as the most obvious. The analogy afforded by drowning is, to our mind, especially suggestive. We may remark that here we have to do with a highly probable alternative of normal brain function in the stimulant-sedative influence of a disturbed circulation. The advent of asphyxia implies the turgescence of all venous channels and capillaries, and the increasing accumulation in these of carbonic acid. It appears to us that the same process must occur in falling. As a rule the fall takes place with head downwards. At the same time there is exerted upon the respiratory passages the suction force of the outer air in rapid transit, acting, we may conclude, in much the same manner as water in a large tube which draws into its own volume the fluid contents of any small communicating channel. Thus it would seem at least a reasonable hypothesis that the coma of death in the circumstances referred to, like the same condition in various forms of disease, is essentially a process of deoxidation of tissue with accumulation of carbonic acid.—*Ed. London Lancet*, March 26, 1892.

**Kelsey (C. B.) on Indications for Colotomy.**—1. In all cases of cancer which cannot be completely extirpated, where the disease is liable to produce any degree of obstruction, or is broken down and discharging into the rectum. It is possible to have cancer near the rectum which will cause no symptoms referable to the rectum, and hence furnish no indications for operation.

2. In all cases of incurable non-malignant ulceration where the disease is too

extensive to admit of complete resection of the ulcer.

3. In all cases of threatened obstruction where the obstruction cannot be permanently overcome by attacking it directly; for example, the obstruction due to old pelvic cellulitis in women.

4. In all cases of recto-vesical fistula.

5. In cases of congenital malformation where the rectal *cul-de-sac* cannot be dissected out and brought down to the surface.—*Therap. Gazette*, Jan. 15, 1892.

## BOOK NOTICES.

In our preliminary notice of the **American System of Surgery** and the **American System of Medicine**, we wrongly credited the publication to Messrs. Davis & Co. They are to be published by the W. B. Saunders Co., of Philadelphia, to whom we offer an apology for our mistake.

**The Prescribers' Pharmacopeia.** Kemp & Co., Bombay, 1891.

An outline pocket manual of the British Pharmacopeia, and containing all the new remedies, together with much useful general information.

**The Mediterranean Shores of America: or, The Climatic, Physical, and Meteorological Conditions of Southern California.** By P. C. Remondino, M.D., Member of the American Medical Association, etc. Illustrated. 8vo, 176 pages. Price, \$1.25, net; paper, 75 cents, net. Philadelphia: The F. A. Davis Co., 1892.

This is intended as a guide-book for travellers, and, as well, to give advice and information to physicians concerning the different varieties of climate met with in the far distant State. The latter has become such a resort for invalids that the profession will be glad to know from one of their number what the limitations are of benefits to be expected from the climate. Dr. Remondino writes in a conservative tone, and yet, like all physicians who write on similar topics; has an attractive style. He has produced a readable book.

**Bacteriological Diagnosis.** By James Eisenberg, M.D., Vienna. Translated by Norval H. Pierce, M.D., Chicago, Ill. pp. 184. Philadelphia: F. A. Davis Co., 1892.

This volume is largely made up of tables, which give systematically the different characteristics of the common germs. It is therefore useful as a laboratory guide, *e. g.*, Non-Pathogenic Bacteria: *Bacillus prodigiosus*—place found, form, and arrangement, mobility, growth (on the various culture media), etc.

An immense amount of work has been expended in preparing these tables. The book will be of especial service to beginners in bacteriology.

**The International Medical Annual for 1892.** pp. 644. New York: E. B. Treat & Co.

The appearance of this annual publication for another year is the best tribute to its usefulness. It has grown in size with age; this last volume is in every sense the best one of the long series. A few new names are noted among the list of authors: Armand Ruffer writes on "Bacterial Pathology,"

and Mr. Thorburn on "Spinal Surgery." Dr. Colcott Fox has succeeded Dr. Jamieson in the Department of Skin Diseases. Special articles on "Cystoscopy" (Henry Fenwick) and "Rhinoscopy" (Greville McDonald) are appended; and lastly, a new topic claims attention—"Photography in Clinical Medicine," by Mr. Pringle. Messrs. Treat & Co. are to be congratulated on having given to the profession such a notable volume.

**Insomnia and Hypnotics.** By Germain Sée, M.D. Translated by E. P. Hurd, M.D. Physicians' Leisure Library. Published by George S. Davis, Detroit, Michigan.

This little book begins with a preliminary disquisition on the physiology of sleep. Insomnia and the use of hypnotics is then ably discussed in a scientific and practical manner.

The various chapters abound in valuable hints and suggestions for the general practitioner.

W. M. L.

**Syphilis in Ancient and Prehistoric Times.**

By Dr. F. Buret (Paris). Translated from the French, with notes, by A. H. Ohmann-Duménil, M.D. Philadelphia: F. A. Davis.

The author, in his preface, says that the book is written as much for those interested in science or letters as for physicians and patients. He has succeeded in making it very readable, especially to the laity. He considers syphilis to be as old as the world, for the Chinese had medical treatises on the disease dating back some 5,000 years. He says that the Psalms of David describe excellently well the tertiary symptoms. He exonerates America from the imputation that she is the source of the introduction of syphilis into Europe.

The book contains a large amount of information on syphilis and allied subjects, and closes with a chapter on the general treatment of the disease.

B. E. V.

**Essentials of Medical Physics.** By Fred J. Brockway. (Saunders' Questions Compend.)

This small volume of about three hundred pages contains all that is essential for a medical student to prepare for an examination. It is really Ganot condensed, with practical points from Professor Chandler's lectures. The chapter on photography is very good, and will be much appreciated by the students. The whole book is very accurately and carefully written, and the subjects are well illustrated by plates. I am sure it will be very popular.

B. E. V.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## EXTRACTS FROM RECENT FRENCH MEDICAL LITERATURE.

BY ALEXANDER H. TRAVIS, M.D.

**Delaunay (H.) on Lesions of the Pancreas in the Pathogeny of Diabetes Mellitus.**—Having briefly reviewed the various theories of the mechanism of the production of diabetes mellitus by lesions of the pancreas, M. Delaunay concludes that the theory of M. Lépine, based on experiments made with the collaboration of M. Barral, is the true one. According to this theory, lesions of the pancreas produce diabetes by diminishing the quantity of a ferment named glycolytic, which possesses the function of destroying the glucose of the blood. This glycolytic ferment is produced by the pancreas, and should not be confounded with the saccharizing ferment. It is diminished by asphyxia, and disappears completely if the asphyxia is as deep as possible and continues long enough.

The glycolytic ferment is absorbed by the lymphatics and veins. Absorption by the lymphatics is proved by the fact that lymph from the thoracic duct of a dog possesses very considerable destructive power over glucose. Absorption by the veins has been established by experiments proving that the blood of the portal vein destroys sugar more actively than arterial blood.

In the cases, rare perhaps, but incontestable, in which the lesions of the pancreas have not been accompanied by diabetes, it would seem that there have been phenomena of physiological substitution on the part of other organs, probably the intestinal and salivary glands. Martinotti has observed intense karyokinesis of the

epithelium of the glands of Lieberkühn after extirpation of the pancreas. Lannois has noticed that the administration of pilocarpin to a diabetic young woman diminished the quantity of sugar contained in the urine. This can be explained by functional overactivity of the salivary glands under the influence of medicament. It can also be supposed that the pilocarpin acts directly on the pancreas, stimulating it.

Cases of diabetes in which no change has been found in the pancreas at the autopsy do not invalidate the theory of MM. Lépine and Barral. Glycosuria, as a consequence of hyperglycæmia, may be due to various causes—for instance, exaggerated production of sugar. It is clear that in such a case the pancreas might be normal. It is necessary to add that often this organ has not been examined, either microscopically or with the naked eye.—*Poitou Médical*, March, 1892.

**Cornil and Chantemesse on the Microbe of Influenza.**—The writers have made experiments with the blood of patients suffering with uncomplicated influenza, inoculating it into rabbits. In the patients' sputa, and in the blood of the patients and rabbits, and in cultures made from it, the same bacillus presented the characteristics described by Pfeiffer and Canon, was present. They believe that these observations, confirming those of Babès, Pfeiffer, and Canon, authorize the consideration of influenza as an infectious disease caused by a special bacillus.—*La Tribune Médicale*, Feb. 18, 1892.

**Sée (Germain) on the Salts of Calcium.**—In a paper read before the Académie de Médecine, S. refers to the dyspepsias and deficiency of lime in the constitution of growing children, who became weak and debilitated without apparent cause and in spite of strengthening diet. The calcium phosphates usually prescribed are not assimilated. In the conclusion the following properties are attributed to the different calcium salts:

1. The bromide and especially the chloride of calcium should be employed when it is desired to introduce lime into the system. The usual preparations of lime are uncertain, because absorbed in minimum degree, and eliminated in very small quantity in the urine; which shows that they have scarcely passed through the blood.

2. The iodide and bromide of calcium are peculiarly fitted to produce the systemic effects of iodine and bromine. They contain a larger proportion of iodine and bromine than do all the other combinations of these metalloids; and the calcium lacks the undesirable properties of potassium and sodium.

3. The bromide and chloride of calcium act favorably in a large number of dyspepsias and stomach lesions.

4. If calcium iodide is substituted for potassium iodide the effect of the calcium on the stomach is favorable. These salts have a like action on the respiration, heart, and specific diseases; but the dose of the iodide of calcium is smaller and is well supported by the digestive organs.

M. Sée added that the halogen salts may be in part recovered from the blood and urine of the children to whom they have been administered.—*Le Courier Médical*, March 12, 1892.

**Vandervelde (P.). A Case of Primary Encephaloid Sarcoma of the Lung.**—Primary sarcoma of the lung is an extremely rare tumor. The patient who was a woman aged twenty-three years, entered the hospital November 19, 1890. Both parents died at an early age of hemoptyses. She had never been ill before 1888, at which time she was confined to bed five weeks with "pleuropneumonia" on the right side. She had never recovered her health, suffering at short intervals with attacks of severe dyspnoea, accompanied by sharp pains in the right side. In June, 1890, a tumor appeared on the right side, which grew rapidly, and caused sharp local pains. No cough and no expectoration.

On the right side, behind the axillary line at the level of the 5th, 6th, 7th, and 8th ribs was an elliptical tumor, dull on percussion, smooth, and fluctuating.

The tumor was removed December 9th. A short pedicle about 4 cm. in diameter was found, passing through the 6th interspace into the thoracic cavity. After resection of portions of the 6th and 7th ribs, the base of the pedicle was separated from its pleural attachments by use of the thermo-cautery. The two layers of the pleura were here adherent. A considerable fragment of pulmonary tissue was removed at the same time. Recovery from the operation was rapid, and the patient left the hospital January 5, 1891.

The tumor was the size of a fist, and was diagnosed as a small round-celled sarcoma with mucoid degeneration.

June 25, 1891, the patient returned to the hospital. She had lost much weight, had little appetite, there was profuse sweating at night, intense dyspnoea every night, frequent cough, with purulent expectoration sometimes mixed with blood. Respiratory movements were almost suppressed on the right side of the chest; there were supra-clavicular dulness and infraclavicular tympanitic resonance on that side; behind, diminished resonance; and mucous râles all over the right side. An attack of orthopnoea on July 27th was followed by cyanosis, convulsions, and death.

At the autopsy, the right lung, the surface of which was covered with soft, yellowish material infiltrated with milky fluid was friable and hepatized. It was infiltrated with small, round, embryonal cells. In its centre, there was a large cavity, around which the cells had undergone mucoid degeneration. The cavity contained blood clots and pulmonary detritus.

Microscopic examination of the other viscera failed to show similar lesions. That the tumor did not originate from the bones, muscles, or other tissues forming the thoracic walls, was clear from the fact that those tissues were little altered at the time of the operation. It did not proceed from the pleura, since that membrane was altered only at the place where the tumor passed through the thoracic wall. The negative results obtained by examination of the other viscera, and the absence of a tumor, or pains, or circulatory disturbances elsewhere, exclude a distant origin of the tumor.—*Four. de Méd. et Chir.*, March 19, 1892.

**Courtois-Suffit on Purulent Pleurisy.**—Adopting a classification based on bacteriological examinations, M. Courtois-Suffit recognizes two groups of purulent pleuritis. The first group contains the forms of empyema in which a single microbe is found in the effused liquid. In this group are :

1. Empyema associated with the pneumococcus. The pneumococcus, rarely pyogenic in the lungs, readily becomes so in the serous cavities. Almost one quarter of the cases of empyema belong to this class. It may be primary or secondary. The primary form may follow, according to Netter, a slight pneumonia which has passed unobserved. The invasion is acute and accompanied by marked febrile symptoms. The secondary form may follow an appearance of pneumococci at a distance (otitis, peritonitis), and then only an epiphenomenon of a general infection, or it may accompany or follow a pneumonia. If the pleurisy appears during the course of the pneumonia, the effusion is discovered only by auscultation. When it follows the pneumonia after an interval of nine to fifteen days, the invasion may be well marked, as in the primary form, or may be insidious. In general, there are no marked oscillations of temperature or rigors in this group of cases. If left to itself, the effusion may (rarely) be absorbed ; more often it becomes encysted, or is evacuated by rupture. The prognosis in this group is good.

2. Empyema caused by the streptococcus. This form is always secondary, and can follow other affections due to streptococci ; erysipelas, puerperal fever, some forms of angina, of pneumonia, of broncho-pneumonia, or of peritonitis. Infection occurs most frequently through the lymphatics. The invasion is sometimes latent and marked by the symptoms of the primary disease, sometimes acute. The exudate is seldom encysted, is often slight in quantity, and there is no tendency to spontaneous absorption. After aspiration, it is reproduced as long as a little of the pus remains in the pleura. The type of the disease may be very acute, as in epidemics of puerperal fever ; acute, as a frequent complication of *grippe* ; or chronic, the most common type. Either of the last two types may follow the other. The temperature is characterized by broad and irregular oscillations. The diagnosis is based on bacteriological examination. The

prognosis is graver than in the preceding class ; death following general septicæmia, or infection of neighboring organs.

3. Tubercular empyema. Tubercular pleurisy is usually dry. If there is exudation, it is often serous, but, on account of the cachectic condition of the patient, it may become purulent. The evolution of a tubercular pleurisy into an empyema is slow. The search for Koch's bacillus in the fluid is often unsuccessful. The prognosis is very grave, because progressive pulmonary tuberculosis is always to be feared.

4. Empyema due to the encapsulated bacillus of Friedländer. Rarely occurs. The author could collect but two complete observations of this form, which is apparently similar to the first group.

5. Empyema with staphylococci. No cases have been observed.

6. Empyema due to the bacillus of Eberth. Valentini found this bacillus alone in an empyema complicating typhoid fever.

The second group contains those cases of empyema in which two or more varieties of microbes are found in the exudate. It includes cases complicating pneumonia, infectious diseases, tuberculosis, etc., and the gangrenous and putrid empyemas.

After reviewing the anatomical and clinical forms of empyema, the author indicates the treatment applicable to each variety :

In empyema due to pneumococci, if the exudation is slight in amount, simple tapping may be followed by recovery, but the operation of choice is aseptic pleurotomy without lavage.

Pleurotomy is useless in tubercular empyema, and the operation of Nestlander is not well borne and is often fatal. In these cases it is better to practise thoracentesis, with or without injections of antiseptic solutions.

In all other cases of empyema, pleurotomy should be performed and be followed by lavage with antiseptic solutions.

These two rules are insisted upon : 1. The treatment should be instituted immediately. 2. Rigorous antiseptics is absolutely essential. Tapping is useless, even dangerous where pleurotomy is indicated.

General contra-indications to operation are : Cachexia, albuminuria, cardiac disease, tuberculosis, and infectious disease when the empyema is only a complication of serious forms of disease.—*Thèse de doctorat*, Paris, 1891, summarized in *Poitou Médical*, March, 1892.

## REPORT ON NERVOUS AND MENTAL DISEASES.

BY WM. M. LESZYNSKY, M.D.

**Lemke on the Surgical Treatment of Basedow's Disease.**—In the *Deutsche med. Wochenschrift*, 1891, No. 2, two cases are reported. The first patient was a young man seventeen years of age, with cardiac palpitation, exophthalmus, and a large goitre. Sudden attacks of suffocation led to tracheotomy. An unsuccessful attempt was made to open the inferior portion of the trachea. As he was in the meantime becoming asphyxiated the thyroid was split, cricotomy performed, and a canula inserted. After eight days the left half of the gland was extirpated. The exophthalmus disappeared. Seven months later he was in good health, the right half of the thyroid was much smaller, the pulse was regular and normal in frequency, and the prominence of the eyes had subsided. He was able to attend to his duties as a painter without interruption.

The second case was a shoemaker forty-seven years of age. The right half of the gland was removed. Two days after the operation the exophthalmus had decidedly diminished. Six months later the eyes were normal, the left half of the gland had decreased in size, the heart's action was less disturbed. In the last four weeks he was able to resume work, and without difficulty he could ascend several flights of stairs several times daily.

Six and seven months respectively have intervened between the operations and the time of publication.—*Centrbl. f. klin. Med.*, No. 6, 1892.

**Dufour on Bilateral Paralysis of the External Recti.**—The *Progrès Médical*, 1891, No. 36, contains a report of three cases of commencing tabes with the unusual symptom of isolated bilateral abducens paralysis.

I.—Male, fifty years of age. Diplopia had existed for some time. Paralysis both externi, contracted pupils with feeble reaction to light. Knee-jerks present. Romberg symptom. No evidence of syphilis.

II.—Female, fifty-four years of age. Twelve years ago attack of paralysis of left third nerve. One year later transient paresis both externi. Two years ago paralysis left abducens. Soon after the right was also affected. Headache and pain in

intercostal and lumbar regions. Knee-jerks present. No evidence of syphilis.

III.—Male, thirty-eight years of age, without signs of syphilis. Two years ago transient diplopia, which has now become permanent. Bilateral abducens paralysis. Loss of knee-jerks. Weakness in legs. Romberg symptoms.

The author assumes the presence of a nuclear lesion in all of the cases, and emphasizes the diagnostic and prognostic value of similar observations.

**Huguenin on Cerebral Œdema.**—The view is expressed that circulatory disturbances within the cranium do not produce fatal œdema until changes occur in the brain and skull. Among such changes are obliteration of the lymph-paths, cessation of cranial growth with concomitant brain pressure, and brain disease itself.

He endeavors to show the improbability of œdema resulting from congestion by the important fact that, in children dying from hyperæmia, œdema, or mild hydrocephalus, an incomplete streptococcus meningitis was always found.—*Correspondenzblatt f. Schweiz-Arzte*, Bd. xix., No. 2.

**Hammond (Graeme M.) on Convulsive Tic and Its Treatment.**—The term "convulsive tic" has heretofore been almost exclusively applied to what is generally known as "facial spasm." The author, however, applies it to that form of mobile spasm which has been designated by Mitchell as "habit chorea," and by Gowers as "habit spasm." Convulsive tic is characterized by brief spasmodic contractions of individual muscles, or groups of muscles, with periods of rest between the spasms varying in duration from a few seconds to several minutes. The muscular movements are usually quickly made and sharply defined, and differ materially from the slower, aimless, and almost continuous muscular contractions of chorea. Sometimes the spasms are limited to one extremity, sometimes to the muscles of the face and head, and again a spasm of the muscles of one part of the body may be almost immediately followed by spasmodic movements in various other regions. Five cases are reported in detail.



He has secured the best results from the internal administration of conium and atropine in conjunction with small doses of bromide. He usually begins the use of atropine with a dose of about  $\frac{1}{16}$  of a grain, gradually increasing it to the  $\frac{1}{4}$  of a grain. He has used the fluid extract of conium and the alkaloid conine, but prefers the fluid extract. Beginning with an initial dose of five drops, it is increased one or two drops a day until the tic ceases or until the physiological effect of the drug is produced.—*N. Y. Medical Record*, Feb. 27, 1892.

#### Hartley (Frank) on Intracranial Neurectomy of the Second and Third Divisions of the Fifth Nerve.

—The patient was forty-six years of age, and suffered from an intractable form of trigeminal neuralgia. The customary medical treatment had been resorted to without improvement. The infraorbital nerve with Meckel's ganglion had been removed, thirty-one teeth had been extracted, and section of the inferior dental nerve performed with but temporary relief. An opening was made into the skull, and the first, second, and third divisions of the nerve exposed. The second and third branches were isolated at the foramen rotundum and the foramen ovale. They were then divided with a tenotome, and that part between them and a point beyond the Gasserian ganglion was excised. The patient made a complete recovery from the effects of the operation, which was performed August 15, 1891. The pain had not returned at the date of report January 13, 1892.—*New York Med. Journal*, March 19, 1892.

**Spinkler Wharton on Hereditary Chorea.**—This article is a report of three cases and a review of the literature upon this subject. These additional cases all bear a striking resemblance in their clinical features to those already published. The fact of heredity is sustained. In most of the cases reviewed the disease began between the ages of thirty-five and fifty. Mental disease occurs in most patients who are affected with hereditary chorea. In some the mental disturbance does not begin until the individual has been choreic for several years, but in others the insanity and chorea begin at the same time. Sometimes the want of mental equilibrium is noted first. The form of mental symptoms is generally of the same type. There is

melancholia, with a tendency to suicide, irritability of temper, supposed delusions, and occasional outbreaks of violence are common. From a study of the cases now on record he has come to the conclusion that there are two forms of hereditary chorea, one in which the irregular muscular movements begin first, and, after a lapse of years, mental deterioration begins, and the other, in which the mental disease begins before or simultaneously with the chorea. The following conclusions are expressed: Hereditary chorea, while resembling in many respects Sydenham's chorea, differs in so many of its features that it is essentially a distinct and separate affection; that while, as a rule, there is remarkable uniformity in the symptoms presented, there may be variations; for example, in the occurrence of the disease at or before puberty. That it is not an invariable rule that if the disease fails to appear in one branch of the family the descendants of that branch have immunity. That the arrest of the movements by voluntary effort is not a distinguishing feature of hereditary chorea, as in some cases voluntary effort aggravates the movements, and there are many cases of Sydenham's chorea in which voluntary effort arrests the movements for the time. That chorea among the adult insane is a different affection from hereditary chorea with insanity. That the evidence we have indicates that the pathology of the disease is a degeneration of imperfectly developed cells in the motor tract or in the cerebral cortex and in the spinal cord. The occurrence of the disease at an early age in children of some of the cases recorded is confirmatory of this view.—*Medical Record*, March 12, 1892.

**Paul (Constantin) on the Treatment of Neurasthenia by Transfusion (Hypodermatic Injection) of Nervous Substance.**—At a recent meeting of the Paris Academy of Medicine, Constantin Paul compares the stimulating effect of the Brown-Sequard testicular liquid to what often takes place after injections of nervous substance into the subcutaneous cellular tissue.

The liquid which he used was a ten per cent. solution of the gray matter of a sheep's brain; this was first macerated for twenty-four hours in glycerine water, then filtered through Darsonval's carbolic acid filter, which sterilized it. The resulting liquid was absolutely transparent.

M. Paul first injected one cubic centimetre of this liquid under the skin in the lumbar region, and subsequently increased the quantity to five cubic centimetres every third or fourth day, using all the antiseptic precautions necessary. The injection was perfectly tolerated, producing no local or general reaction. Out of more than two hundred injections practised on eleven patients, he failed in any instance to witness any phlegmon or pustule following the injection.

The patients on whom he performed these injections were classed as follows: Four were victims of tabes; one was a case of permanently slow pulse; three were suffering from ordinary neurasthenia; three were neurasthenic chlorotics. There was in all a general tonic effect characterized by increase of strength, appetite, and weight, restoration of spirits and *bien-être*, disappearance of pain, sexual impotence, and insomnia.

M. Constantin Paul concludes that "injections of the gray cerebral substance constitute a true tonic for the neuro-pathic." "The neurasthenic," he adds, "is a patient whose nervous system resembles an accumulator which it is impossible to charge. As long as the disease lasts, the neurasthenic eats to no good purpose, for he cannot transform his food into force. On taking the least exercise, the muscular, nervous, and other forces are exhausted."

"The injection of nervous substance promotes the utilization of foods and their assimilation. The nervous system becomes a condenser which can be charged, and the patient acquires a quantum of forces which he can dispose of at his will. But the nervous force is the first to develop, and this leads to the development of the other forces, and the ability to do work of the muscles and brain."

Great expectations may certainly be entertained of this mode of treatment, if one is prepared to believe, as Dr. Paul affirms, that "the injections ameliorate and cure the neurasthenic and enfeebled more rapidly than the ordinary agents of the materia medica, iron, arsenic, phosphates, opium, and alcohol," and if "their action is more rapid and more certain than that of hygiene alone, of hypnotic suggestion, and of electricity"!—*Boston Med. and Surg. Jour.*, March 17, 1892.

**Eardley-Wilmot (Chester) on an Analysis of Lead Palsy, Treated by Galvanism.**—The author has tabulated 62 cases of lead palsy treated by galvanism.

Of 57 cases under treatment, 19 were cured absolutely, 4 showed no improvement, and 34 were reported as improved. In his experience with electrical treatment, the majority get well in three months, while it has been said that spontaneous recovery occurs, as a rule, in six to twelve months.—*Australian Medical Journal*, Feb. 15, 1892.

**Berkley (Henry J.) on Acute Ataxia (Pseudo-Tabes) Following Diarrhoea.**—The patient was a woman, fifty-eight years of age, without history of syphilis or alcoholism. She had suffered from "diarrhoea" for nearly three months.

The ataxia was limited to the lower extremities. There was pronounced inco-ordination on standing, accompanied by a distressing sense of vertigo. Knee-jerks, plantar reflex, and skin reflexes were absent. Subsequently the knee-jerks and other reflexes returned, and decided improvement occurred. Later, the knee-jerk again disappeared. There was atrophy affecting both optic nerves. The author believes it is most probable that there occurred at the beginning of the trouble an auto-infection from some of the micro-organisms inhabiting the intestinal canal, introduced into the system through a lesion of the intestinal wall, produced by the inflammation of that tract during the diarrhoea, and influencing both the central and peripheral nervous systems.—*Johns Hopkins Hospital Bulletin*, Feb., 1892.

**Swope (S. D.) on Anomalous Congenital Function: Associated Synchronous Movements of Upper Extremities.**—The following remarkable case is reported in the *Medical News*, January 16, 1892:

T. H., a farmer of good habits and healthy family, tall and muscular in form, well developed and healthy, consulted me on April 23, 1891, with a septic wound of the forearm made by a wagon single tree-hook. He explained that the wound had been doing well and, he thought, healing rapidly, until a few days previously, when, with the wounded arm in a sling, he attempted to pick up some trash from the ground with the hand of the uninjured arm.

He then explained that all his life whenever he attempted to do anything with one hand or arm, synchronous and similar

movements were made with the other hand or arm. This was something new to me, and I naturally felt incredulous, but after considerable examination satisfied myself that his statement as to the anomalous nerve-function was correct. Moreover, this peculiarity was transmitted to three of his eight children. Though the movement of his left hand and fingers gave him much pain, immersed as they were in a hot-water bath, any movement of the right hand or fingers produced synchronous movements in the left. If he raised his right hand to his head, the left would involuntarily move as if to leave the water-bath. If he scratched his head with the right hand, the fingers of the left would move as if in the act of scratching.

His little boy, nine years of age, was called, and on holding his right hand between my palms and directing him to scratch his head with the left, the confined hand endeavored to move, though held firmly. The father, in passing a dish at the table, always takes hold of the table with his right hand to prevent it following the left as the dish is passed. If he carries a basket on his right arm, the left is held in the same manner. When writing with his right hand, the left imitates its movements. In short, whatever his right hand does his left imitates, and *vice versa*.

To keep the left hand immovable, the right must be confined in a fixed dressing.

**Gowers (W. R.) on the Diagnosis of Diseases of the Nervous System.**—In a recent lecture upon this subject the author recommends the following plan:

"Whenever you find yourself in the presence of a case that is not at once and completely familiar to you in all its details, forget for the time all your types and all your names. Deal with the case as one that has never been seen before, and work it out as a new problem, *sui generis*, to be investigated as such. Observe each symptom carefully, and consider its significance. Then put the several symptoms together, and consider the meaning of their combination, especially whether there is any one part of the nervous system at which disease might cause them all. Lastly, consider the way they came on, as indicating the nature of the lesion, comparing this with the evidence of their seat, and remembering also that their character may in itself tell you something of their probable nature. When described in the abstract, this may seem a

lengthy process. It may even seem a formidable process. As a rule, it is neither. The common symptoms, even those presented by uncommon cases, are not numerous, so far as concerns their general character and actual nature. The question of localization is only an application of the common physiology of the nervous system, of the facts that should be familiar to every student, and can be re-learned, if necessary, with ease, by every practitioner. All the knowledge needed for this method is that which every student gains, or ought to gain, in the course of his studies; it is only the mode of using the knowledge that is new and has to be acquired. But the student should remember the great importance of 'keeping up' his physiology and anatomy of the nervous system, or at least those parts of it which are needed in practical work. There is no department of medicine that consists more largely of applied physiology and applied anatomy than these diseases. For this reason they should engage the attention of the student early in his hospital work, instead of, as is often the case, being relegated to a late period on account of their supposed difficulty—a period when his science has got 'rusty,' or has slowly vanished, until even its nomenclature awakens a mere echo from bare walls. As a matter of fact, much of the student's hindrance is due to this postponement. The application of his knowledge should be made to retain it.

"But for the successful use of this method it is essential that the knowledge, though neither extensive nor profound, should be firmly grasped and boldly used. Herein lies the chief practical difficulty. Timidity is almost a greater hindrance to diagnosis than is ignorance. You must feel sure of the meaning of symptoms, you must weigh the evidence with care, and then you may and must feel confident that your conclusion is trustworthy. This confidence and boldness can only be acquired by familiarity with the process, by observing its use by others, and afterwards repeating it for yourselves, thus becoming so familiar with the language of disease that you can read it with ease, can see at once the meaning of its words, and perceive with readiness the significance of its sentences."—*The Lancet*, Feb. 20, 1892.

**Gundrum (F.) on the Treatment of Sciatic Neuritis by the Local Abstraction of Blood.**—Believing that the

reduction of the inflammation in the nerve is the quickest way to overcome the disease, the writer recommends what he terms one of the retired methods of treatment,—viz., wet-cupping over the course of the nerve. He reports two cases where this method proved successful after other means had failed.—*The Therapeutic Gazette*, Feb. 15, 1892.

**Dalton (H. C.) on Epilepsy from a Surgical Standpoint.**—This is a report of a successful operation twelve years after the injury.

The patient was a colored lad twenty years of age. He was at times maniacal, during which he would tear the bedclothes, attack the attendants, beat upon the windows of his cell, etc., yelling meantime at the top of his voice. After these violent attacks he would pass into a demented condition; would stand for hours in any position in which he might be placed. There was never a moment in which he was rational. These violent attacks would occur a number of times daily.

He was kept locked up for about two weeks, when it was learned that at the age of eight years, twelve years prior to his admission to the hospital, he was kicked on the head by a mule. One month after receipt of the injury, epilepsy developed, which had steadily grown worse. For a year or two before admission the fits occurred several times daily. There was a cicatrix and a slight depression about an inch and a half above the left orbit. A flap of the scalp was raised at this point and a button of bone removed. No depression was found, the inner side of the skull being perfectly smooth.

The day following the operation he had two slight epileptic spasms, and a slight one on the third day, after which there was no recurrence of the fits. Consciousness returned in a few days, the mental condition becoming clearer day by day. The wound healed nicely, and in two weeks the patient was walking around the hospital. He was discharged in two months, apparently perfectly well.

The fits have never returned, and his mental faculties have remained as bright as those of most young men of his race. It is now over three years since the operation.—*The Medical Fortnightly*, February, 1892.

**Rose (Wm.) on the Surgical Treatment of Trigeminal Neuralgia.**—This was the subject of the Lettsomian Lectures

delivered before the Medical Society of London, January 4, 1892. The author recommends that in future, wherever practicable, the portions of resected nerves should be examined microscopically, and thus every opportunity taken of learning more of the local conditions which may be present; all cases operated on should be kept under observation, if possible, for years, so that reliable statistics may be obtained. The great majority of recorded cases are diminished in value from the fact that this precaution has not been adopted. After remarking on the frequency with which the fifth pair of nerves was attacked, he suggested the following as a convenient *etiological classification*:

- I. Intracranial—cerebral;  
radical;  
ganglionic.
- II. Cranial.
- III. Extracranial or peripheral.
- IV. Toxic, *e. g.*, mercury, lead, or malaria.
- V. Reflex.
- VI. Functional.

**Results of Operation.**—In considering the results of partial or complete removal of the Gasserian ganglion, Mr. Rose continued, the first question which has to be answered is naturally, What effect has this proceeding upon the pain? Up to the present time we are able to give a satisfactory reply; all the five patients whom I have treated in this way have remained free from the typical and terrible paroxysmal attacks from which they had previously suffered. It is true that my first case was done only twenty-two months ago, and the last only sixteen days; consequently, it is too early to speak with confidence as to the permanent character of the relief; but the outlook is hopeful, and is sufficiently encouraging to lead me to continue in the same line of action. Absolute immunity from any kind of pain can hardly be expected after such a considerable disturbance of the structures at the base of the skull, and for some time there may persist a sore and stiff sensation about the region operated on as well as pains in the head; but these are not estimated of any moment by patients who have previously suffered such intense agony. The interference with the movements of the lower jaw is undoubtedly inconvenient, and renders the process of mastication a little difficult; but I hope

that this may be avoided in the future by the removal of the coronoid process.

As to the effect upon the distribution of the sensory fibres of the fifth nerve, it is interesting, both from the clinical and physiological sides, to observe the rapid diminution of the anæsthesia area, and it would appear that the distribution of sensation is taken up by the neighboring branches, much in the same way as arterial anastomosis takes place in the vascular system. This re-establishment of sensation is a fact which cannot be disregarded prognostically, although it is not necessarily the precursor of a relapse. The appearance of the side of the face operated on is characteristic of trophic disturbance; the skin has a shiny, somewhat injected look, whilst the hollows in the temporal, pyterygoid, and maxillary regions on that side clearly demonstrate the existence of muscular atrophy and cicatricial deposit.

The effect upon the nutrition of the eyeball is decidedly serious. In the first case, as is well known, the organ was lost, a result of suppurative panophthalmitis, and in two of the other cases the nutritive state

was for the time considerably depressed. It is probable that the trophic centres for its nutrition are contained in the upper and anterior segment of the ganglion, and if this be so, the chances of damaging the eye will be lessened by leaving this portion intact, even though the trunk of the nerve be divided behind the ganglion. On the other hand, the interference with one part of the ganglion may induce degenerative changes in the remainder which will effectually prevent a recurrence of the malady, and yet not sufficient to cause permanent damage to the eye.

In conclusion, Mr. Rose maintained that in the course of these lectures he had demonstrated (1) that in severe cases of epileptiform neuralgia both medical and surgical treatment had hitherto been unavailing to give permanent relief, and (2) that extirpation of the Gasserian ganglion through the base of the skull, though admittedly a difficult undertaking, need not endanger life, and at present holds out the best prospect in dealing with the intractable forms of trigeminal tic.—*Medical Press and Circular*, Jany. 6, 1892.

## REPORT ON THERAPEUTICS.

**Freudenthal (W.) on Poisoning by Creosote.**—The author thinks it somewhat remarkable that in view of the recent extensive use of creosote, no cases of poisoning therefrom have yet been reported. This is all the more remarkable because we know that the two- or three-drop doses with which we at first contented ourselves are practically inert and that to do any good the remedy must be vigorously pushed. Dr. Freudenthal relates one case bearing on the topic. His patient, a woman, aged thirty, gradually increased her dose up to 300 drops daily. From this begins the history of the poisoning as follows:

On January 29th, eleven A.M., she took the usual 300 drops, and went walking, but not feeling well, returned shortly and drank a glass of wine. Still feeling weak, she thought of the drops, which at all times had helped her greatly, and thereupon took another dose of 300 drops for quicker relief. The results were of the most exciting nature. She had hardly strength enough to drag herself to her bed, where she lay unconscious for eight to nine hours. When I saw her, late in the evening, she

looked like one in narcosis. Her eyes were closed, and she was puffing and blowing incessantly, her breathing being stertorous. There were loud, coarse râles, which could be heard from a distance, over the whole chest. She was in a state of intense trismus (lock-jaw). The teeth were so tightly clenched that it was impossible to separate the jaws. Her lips were cyanotic, and the pupils were contracted and did not react. There was a general loss of sensibility, and paralysis of all reflex movements. Her pulse was 128, and the respiration about 30. She urinated in bed, but the bedclothes were not blackened. The urine was of a light color. After watching the patient awhile, I saw signs of gradual recovery. Holding ammonia under her nose, she slightly moved her head. A mustard foot-bath was given, and ice applications were made to the head; then she awoke and felt no disagreeable results, nor did she feel any evil consequence of this intoxication during future treatment.

Concerning the treatment of poisoning cases in general, Dr. Freudenthal says:

In the future, should you meet with a

case wherein these simple remedies do not have the desired results, I would draw your attention to the following note: "The question as to whether the antidotes, consisting of the soluble sulphates, which are so efficacious in carbolic-acid poisoning, would be equally effective in poisoning by creosote derived from beech-wood, has been studied by Hare, of Philadelphia. It will be remembered that these substances unite with carbolic acid, forming sulphocarbolates, which are virtually innocuous. In these experiments it was found that animals receiving very large poisonous doses of creosote could invariably be saved if soluble sulphates in sufficient quantity were administered."

To Mrs. H——'s history I will add that after the intoxication she again took the creosote, but was obliged to begin, as she was at all times after a pause, with small doses, increasing them so rapidly that she very soon reached 300 drops. At last the dose was increased to the extraordinary large amount of 500 drops twice daily; then pneumonia on the left side developed, but she is now convalescing.

Creosote is undoubtedly a strong poison, and must naturally have poisonous effects, either taken without graduation in a large quantity, or, as my patient did, increased (although accustomed to a large dose) suddenly to a far larger one. On the other hand, there are but few remedies that one can become so easily habituated to, and which the organism can for so long a time bear as well as creosote.

When Beverley Robinson, supported by others, states that the patients in the United States cannot take creosote in large doses, I disagree with him, and firmly believe that there are many in this country who can bear very large doses, and for these the more we administer the happier results we obtain.—*N. Y. Med. Record*, April 23d.

**Chappell (W. D.) on Euophen in the Treatment of Throat and Nose Diseases.**—Euophen is an amorphous, light yellow powder with very slight odor, and may be used either in powder form or, as it is soluble in alcohol, ether, and all fixed oils, it can be sprayed over the parts. The powder, however, is preferable. Six months ago I began to use it in a case of rhinitis foetida, and since that time have treated fifteen persons suffering from this disease. I propose to give a short general sketch of the results.

Three cases, which received daily treatment during a period of four months, seem perfectly cured and have not the slightest return of the trouble after a month's cessation of treatment, and the mucous membrane of the nasal cavities has a very healthy appearance. The other cases are still under treatment and in various stages of improvement, exceeding anything I have obtained from other methods. The parts should first be cleansed with a half per cent. solution of creolin, and then by means of a small powder-blower thoroughly covered with the euophen. This should be repeated every morning and the patient directed to use an ointment at night, consisting of two drachms of euophen to an ounce of vaseline, applied with a camel's-hair brush inside the nostrils. This treatment at once excites a watery discharge, which at first is mixed with a quantity of soft yellow mucus, which gradually becomes thinner and lighter in color and less in quantity, until we have only the watery discharge left, with a puffy red condition of the mucous membrane. Whether this benefit will be permanent it is too early to say, but certainly the prospect is very encouraging. I have used euophen in one case of suppurative catarrh where, after removing a good part of the anterior portion of the middle turbinated bodies, I blew in the powder of euophen and with a small probe endeavored to work it into the sinuses. After beginning this treatment the patient improved rapidly, although she had been under my care for eighteen months previous with little benefit. Euophen is also of great value after all operations in the throat and nose, on account of its hæmostatic and antiseptic properties.—*N. Y. Med. Record*, April 23, 1892.

**Spiegler and Hoch on a Substitute for Iodoform.**—Spiegler and Hoch report a new drug which they consider superior in many ways to iodoform in the treatment of wounds. This drug, *thio-phen-di-iodid*, has the disadvantage of a lengthy technical or scientific name, but its power of preventing the development of staphylococcus, the usual active principle in pus, is confidently assured.

Thiophendiiodid has the formula  $C_4H_2I_2S$ , forming in tabular crystals, slightly volatile, and melting at  $40.5^\circ$  Celsius. In water it is insoluble, but easily dissolved in ether, chloroform, and warm alcohol. The iodine contained 75.5 per cent., sulphur

9.5 per cent., both in combination with carbon. The odor is an unpleasant aromatic one. The wound heals kindly without any eczema around. To saturate gauze with a 10-per-cent. solution,

R Thiophen-di-iodid, 50.0;  
Alcohol,  
Ether, aa 500.0;  
Glycerine, 10.0,

is recommended for dressing. In order to observe if the gauze had been thoroughly done, two or three grammes of an alcoholic solution of saffron should be added.—*Eng. Med. Press*, April 20, 1892.

**On Salipyrin.**—This is a salicylate of antipyrin occurring in crystalline scales or in powder; it is odorless, of a pleasant acidulous taste, almost insoluble in water and ether, and freely soluble in alcohol. It may be given in all cases in which the combined action of antipyrin and salicylic acid is desired. It lowers the fever temperature of the body, and has pronounced analgesic action in cases of acute articular rheumatism, diminishing the tense and painful feeling in the affected joints, without producing the profuse perspiration seen after the use of salicylic acid. In rheumatic sciatica and in neuralgias of the face of rheumatic origin, its action is prompt. Hennig recommends it in influenza. *Dose*—from 15 to 30 grains at intervals of two, three, or four hours, until 90 grains are taken. It may be administered in capsule, wafers, or in solution thus: Salipyrin, 1½ drams; glycerin, 3½ drams; syr. rub. id., 7½ drams; aqua destil., 10 drams. Of this a tablespoonful should be taken at a dose. *Analgesic, antipyretic.*—*Phil. Med. News*, Apr. 23, 1892.

**Burnett (S. G.) on New Observations in the Use of Sulphonal.**—The author gives four clinical histories, in all of which it is stated that the use of sulphonal caused loss of reflex with more or less inco-ordination. From a standpoint of diagnosis, it is important to know if the loss of reflex be due to disease or the use of sulphonal before coming to be examined, as a prognosis based on the loss of reflex due to organic disease would be quite dissimilar to the same condition due to the use of sulphonal.

By accepting the reflex theory advanced by Gowers, and that sulphonal, as an hypnotic, acts upon the cells of the cerebral cortex, we can account for the absence of the reflex in these cases. Gowers infers

that we have a restraining or inhibiting power over the reflexes situated in the corpora quadrigemina or optic thalami, as has been demonstrated to exist in the optic lobes of the frog. Again, these inhibiting centres are controlled by a power residing within the higher or motor cortical cerebral centres, provided they are in a healthy state of activity. Now, if from any cause these cortical cells are prevented from exerting their power of control over the centre which inhibits the reflex, this centre goes uncontrolled and holds our reflex in check—that is, abolishes it. This would seem the most lucid explanation, for certainly all cortical functions seem suspended when under excessive doses of sulphonal, especially when toxic manifestations exist. Time and again of late I have been able to diminish the reflex by continued full doses of sulphonal, and to allow it to appear again by diminishing the dose or discontinuing it entirely.—*N. Y. Med. Jour.*, Apr. 9, 1892.

**Brinton (J. H.) on the Dangers of Anæsthesia by Ethyl Bromide.**—On my first trials, I thought that the ideal anæsthetic had been found, but on larger and closer experience, peculiar phenomena were manifested. In many instances I observed a tendency to muscular rigidity, affecting the flexors and extensors equally. Sometimes special groups of muscles on the upper or lower extremities were involved. Occasionally the spasmodic contraction was more general, as in the whole length of the back. Several times I witnessed complete opisthotonos, the patient resting on his heels and occiput, with the characteristic arched and rigid back. The abdominal muscles frequently underwent excessive and knotty contraction, and this spasmodic action often showed itself in a remarkable degree in the cremaster muscles. In one case of castration, after a retaining loop had been carried through the substance of the cord and the latter divided, so powerful was the action of the cremaster, that the cord was instantly torn away from the hold of the string, and dragged up so that its bleeding end rested at or inside the internal ring. It was only reached by splitting up the inguinal canal in its entire length. In a second case of castration the same violent contraction of the cremaster was present, but was controlled by anticipation.

Another peculiar attendant upon the

anæsthesia of bromide of ethyl is the degree and violence of the arterial hemorrhage. This must be caused by increased arterial tension, and was briefly alluded to by Dr. Levis, in his article on "Ethylyzation," published in *Medical Record*, March 27, 1880. In the same paper he says that muscular action or rigidity may be occasionally manifested. It was this frequent and marked muscular rigidity, amounting to general tetanic spasm, which first led me to doubt the safety of bromide of ethyl as an anæsthetic. In consequence of this suspicion and of the evident tendency to excessive and apparently unnecessary hemorrhage, I discontinued its use shortly before the occurrence of the two fatalities which led to its general abandonment by the profession. One of these occurred in a young man about to undergo lithotomy. The death was instantaneous, and without premonition, and was not sufficiently explained by the post-mortem appearances. It probably was due to some cardiac cause.—*Therap. Gazette*, Apr. 15, 1892.

**Winslow (K.) on Nitrites: Their Therapeutic Action and Scope in Medical Practice.**—W. summarizes the therapeutical indications for the employment of nitrites as follows: (1) to dilate the peripheral arterioles and equalize the circulation in internal congestions; (2) to stimulate the heart; (3) to relieve spasm of vascular, nervous, or muscular origin; (4) to increase the quantity of urine and diminish the amount of albumen; (5) possibly to relieve pain.

The original paper is an elaboration along these lines with records of illustrative cases.—*Bost. Med. and Surg. Jour.*, April 14, 1892.

**Tuttle (A. H.) on a New Use for an Old Remedy.**—After reading an article in the *Lancet* upon a new method of intestinal anastomosis, in which Woeffer's solution—compound tincture of benzoin, containing a small quantity of iodoform—was employed for sealing the line of excision, it occurred to me that this would be an excellent substance for protecting the wound in perineal operations. The success of this operation, especially when buried animal sutures have been employed, depends not only upon the aseptic precautions during the operation, but also upon the maintenance of the aseptic condition of the wound after the operation. The latter is the more difficult part of the procedure,

since the urine is liable to get into the wound and do harm, and the wound may also be contaminated by discharges from the rectum. To protect it from this danger, a seal of absorbent cotton and collodion has been employed, but this will not adhere to a mucous surface and is therefore imperfect.

The compound tincture of benzoin answers this function very well. In recent work on the perineum, I have applied three coats at the time of operating, and an additional coat every time I wished to draw the urine. I have not tested it as yet in primary restoration of these parts, but think it may be useful. Applied in this manner, it protects very satisfactorily the scratch-like remains of the wound that is left after its closure with buried sutures.—*Bost. Med. and Surg. Jour.*, April 14, 1892.

**Evans (H. L.) on a Case of Hyoscine Poisoning Treated by Pilocarpine.**—On Oct. 16, 1890, I was called to J. B—, a case of delirium tremens, at 4:45 A.M. He had just had a fit. This, in his case, was no unusual occurrence, his first attack having begun on Sept. 20th of the same year with an epileptiform seizure. Chloral, bromides, and morphia had previously failed to produce sleep, so a two-minim injection of a 1 per cent. solution of hyoscine was given, but this also failed. Eight hours later he had nearly three minims by the mouth, with no better result. In the evening morphia and chloral were given without effect. Later on, as he could not be kept in bed and was quite unmanageable, a three-minim injection of hyoscine of presumably the same strength, but from a different bottle, was given. The patient rapidly became comatose with dilated pupils and arteries, rapid pulse, congested face, hot, dry skin, and rapid and deep breathing. Morphia was injected, but without any apparent improvement. Directing that the patient should be energetically stimulated by pinching, I hurried to the surgery, and on returning with pilocarpine found that, as before, the patient could not be roused. Unfortunately no record of the injections of this was kept. So urgent seemed the necessity of producing symptoms approaching those characteristic of the drug that injections were made in the thighs and arms at intervals of about five minutes. In a short time there was a faint reaction of the pupils to light, with a tendency to moistness of skin, whilst the



breathing and pulse improved ; and on my next holding the candle to the face I was gratified by seeing the patient knock it from my hand, after which rapid improvement took place, followed by complete recovery. Great soreness and itching were complained of next day, the latter relieved by alkaline washes and cocaine ointment. His thighs and arms showed marks of about eight punctures, and he had probably had about two grains of nitrate of pilocarpine. His general health improved under strychnine and red extract of cinchona, etc.—*Lancet*, April 9, 1892.

**Wood (J.) on Chloralamide.**—The dose which yields the best result is from thirty to forty-five grains. Not more than one hundred grains should be given in twenty-four hours.

The conclusions based upon its use in two hundred and eighty cases are briefly as follows :

That it is a most useful hypnotic, reliable, safe, and pleasant.

That it has a place as an anhidrotic in phthisis.

That it is superior to other drugs because in hypnotic doses it stimulates respiration, and but slightly, if at all, influences pulse, temperature, or urinary secretion.

That no collateral symptoms of any consequence exist.

That the best hypnotic dose for an adult is forty grains.

That it is given preferably in an alcoholic solution just before retiring.—*Brooklyn Med. Mag.*, April, 1892.

**Winternitz, on a New Remedy in Diabetes Mellitus.**—Professor Winternitz, of Vienna, recently drew attention to a domestic drug that he thought had been neglected. He related several renal cases that he had successfully treated by an extract made from the wild bilberry. His first experiments with the extract were directed towards the mucous membranes of the mouth, and finding it successful, extended his observations to the bronchi, bladder, and renal organs, where he met with equal success. He admitted having combined with the treatment the hydropathic applications, which were considered to have modified the avowed action and efficacy of the drug. Weil, of Berlin, has now added new testimony to the record of value attributed to this plant in assuring us that it has acted in a wondrous fashion in apparently curing a young man of dia-

betes mellitus. His case was a telegraphic clerk in Berlin, who consulted him in 1889 for general indisposition, but whose external appearance betrayed a saccharine disposition, which examination confirmed.

**Preparation.**—The leaves are pulled before the berries are ripe ; two handfuls of the leaves are infused in two litres of water and boiled down to the half. What the therapeutic action of this preparation is Weil will not offer a suggestion, but is anxious for a future analysis, hoping that the *vox populi* may have good reason for their hypothesis.—*Eng. Med. Press*, April 20, 1892.

**Fulton (A.) on Diphtheria and its Treatment.**—The bacterium of diphtheria has an especial affinity for the tonsils. Its presence on these organs is the local manifestation that chiefly characterizes diphtheria. If not early and thoroughly destroyed, it will multiply and extend its ravages with wonderful rapidity and injury.

The subjoined treatment is based upon this theory, and has been successful in thirty-seven consecutive cases. It consists in the application to the patches of a strong solution of argentic nitrate,  $\mathfrak{Dj}$  to  $\mathfrak{f}\frac{3}{4}$  ss of rose water, by means of a throat-brush, so constructed that it will not break, etc.

In the early stages of the disease the patches can almost invariably be wiped off with one sweep of the brush, which is not the case later on, when they become deeply adherent. These applications should be made twice a day, morning and night, but may be used according to the exigencies of the case, or so long as the deposits are observed, since they show a tendency to reappear. Often after one effectual cleansing of the throat in this way the patches do not return, and there is a subsidence of all of the symptoms of the disease. The agent must be kept in a blue bottle excluded from the light, and the brush or whatever instrument is used in making the application should be washed and kept in an antiseptic solution.

If practicable, the foregoing procedure should be immediately followed by a gargle, such, *e. g.*, as the following :

$\mathfrak{B}$ .—Tinct. kino.....  $\mathfrak{f}\frac{3}{4}$  ij.  
Glycerin.....  $\mathfrak{f}\frac{3}{4}$  ij.  
Ol. eucalyptol..... gtt. x.—*M.*

*S.*—A teaspoonful in a tablespoonful of water as a gargle.

The operator may wear gloves to prevent discoloration of the hands by the

silver, and the face should also be guarded from the stain.

Whether or not the gargle be used, the throat should be dusted with the following :

- B.—Hydrarg. chlor. corros. .... gr. j.  
     Pulv. sulphuris. .... 3 j.—M.  
 S.—Blow a pinch into the throat every four hours.

The following remedies are administered :

- B.—Pulv. potas. chlorat. .... 3 ij.  
     Tinct. ferri chlor. .... f 3 ij.  
     Syr. limonis. .... f 3 ij.  
     Ol. gaultheriæ. .... gtt. iij.—M.  
 S.—A teaspoonful every two or three hours.

Also apply externally, over the site of the tonsil :

- B.—Tinct. iodi. .... f 3 ij.  
     Ol. camphorat. .... f 3 j.—M.  
 S.—Apply every four hours.

This is best done by wetting a piece of flannel with the remedy and holding it in place by means of a roller bandage.

When there is a rise of temperature, indicating the need of antipyretics, he resorts to small doses of antipyrin and withholds its use upon a sufficient diminution of temperature. During convalescence he advises the use of mist. ferri et ammon. acetatis, light nutritious diet, and champagne.

Sometimes the stomach is so irritable that it rejects everything given. This condition is generally alleviated by giving the wine.—*Phil. Med. News*, April 23, 1892.

**Dercum (F. X.) on the Water Bed as a Means of Reducing Temperature.**—Commenting on this recent proposal made by Dr. H. C. Wood, that the water-bed could be used as a device for lowering temperature, Dercum says that this suggestion can hardly be considered as practicable, inasmuch as in fever a *moist* cold and not a *dry* cold is indicated. In sponging, the benefit derived from the water is due not only to the low temperature of the water employed, but to the evaporation from the surface of the body. Again, it would be impossible to regulate the temperature of the bag, when filled with cold water, with the same nicety with which we regulate the temperature of the bath. Further, the bath flows all about the patient, and all parts of the body are cooled alike. In the case of the cold bag, only the surface of the body in contact with it would be chilled. Whether such a persistent local chilling would not result in

depression and shock would be a matter for serious consideration.—*Univers. Med. Mag.*, May, 1892.

**Fussell (M. H.) on Salol in the Treatment of Typhoid Fever.**—I would be distinctly understood to say that I do not consider salol a specific in typhoid fever, but think I am justified in saying that salol is a useful remedy. I do not think it materially shortens the course of the disease, and it certainly does not lessen to any marked extent a high temperature, though it may, perhaps, as it seemed to do in some of my cases, prevent a continuance of high temperature. It certainly controls the diarrhoea, changes the character and fetor of the stools, and relieves the annoying condition of dryness of the mucous membrane, so generally observed in cases of typhoid fever.

The writer then epitomizes the history of thirty-five cases. The remedy was in general given in five-grain doses every three hours. He gives the following summary :

Of thirty-eight cases treated, thirty-five recovered. Hemorrhage did not occur once, diarrhoea was either absent or quickly controlled in a great majority of cases, the dryness of the mucous membrane was either absent or markedly improved in a great majority of cases.

This series of cases, with a death-rate of but eight per cent., while small, compares favorably with a like number of consecutive cases, treated on the expectant plan. The urinary symptoms, but in few of the cases, were never badly affected ; in some the peculiar greenish-black color of the urine, characteristic of the elimination of salol, appeared very quickly, in others only after a considerable time. During the use of the drug, tube-casts were not found, and cases where albumen existed were not badly affected by the use of the drug. While Fussell would hesitate to use salol in cases of a true nephritis, the very general belief that salol is dangerous when used to the extent of coloring the urine, is not supported by his experience with the drug. A partial suppression of the urine sometimes occurred, but the secretion was re-established without stopping the use of the drug.—*Univers. Med. Mag.*, April, 1892.

**Waugh (W. F.) on Glycerine for Hypertrophied Tonsils.**—Glycerine has long been one of our chief remedies in uterine enlargements and congestions. By

its hygroscopic qualities it abstracts serum from the tissues to an extent that would scarcely be credited by those who are not familiar with its action. In a case of infiltrated eczema also, I once performed a notable cure by depleting the thickened skin by means of pledgets of cotton saturated with glycerine. When the infiltration had been reduced, the ointment of red iodide of mercury exerted its usual curative action, although the same agent had failed before the use of the glycerine.

In the case of tonsillitis, it did not seem likely to be of service. The constant secretion and swallowing of saliva would so quickly remove the glycerine that its action could not last long. But the child was fortunate in having a nurse of unusual qualities, and she promised to make very frequent applications. This was accordingly done, and at least twenty times a day the child's tonsils were painted with the purest water-free glycerine.

The result has been better than we expected. In the course of a few weeks, the enlargement has steadily lessened, and has now almost disappeared. The suggestion may be an old one, as it is one of those very obvious ones, that is apt to occur to any one familiar with the utilization of the hygroscopic qualities of glycerine for other purposes. It can scarcely be expected, however, that this method of reducing hypertrophied tonsils will be successful, unless under such exceptionably favorable conditions as existed in the present case. —*Times and Register*, April 16, 1892.

**The Mode of Action of Guaiacol in Tuberculosis.**—Drs. Hölscher and Seifert have shown that guaiacol was found in the blood in a state of combination. Now the albuminoids are, of all the constituents of the blood, the most prone to enter into combination with foreign substances, and as guaiacol is excreted in the form of a sulphate, they concluded that the blood combines with the blood-serum by means of the sulphur which the latter contains. But the blood of a phthisical person contains, besides the normal albuminoids, others formed through the agency of the bacilli. These latter albuminoids are very unstable, and are prone to undergo chemical change whereby they became poisonous. It is the presence of these toxic albuminoids that gives rise to the constitutional symptoms of tuberculosis, anorexia, fever, night-sweats, etc. But

they are much less stable than the normal albuminoids, and combine more readily with guaiacol and certain other substances introduced into the circulation, forming with them harmless compounds. Thus it is that an amelioration of the general condition follows as promptly upon the administration of this drug in the case of pulmonary tuberculosis. The guaiacol does not act upon the bacilli at all, but simply renders harmless the toxins elaborated by them. The local pulmonary process is not influenced directly by the drug, but the constitutional disturbance is removed, the fever subsides, the night-sweats cease, the appetite returns, the digestion is improved, and health is restored. Thus the organism is strengthened and is enabled to cope successfully with the bacillary invasion if the latter be not already too far advanced.

The greater the amount of the remedy which is introduced into the system, the more completely are the toxins destroyed; hence large doses are advisable. And as the authors have shown in a previous communication that guaiacol carbonate is better tolerated than the pure drug, it is this form that they recommend. —Ed., *Med. Record*, March 12, 1892.

**Strychnine in the Pneumonic Crisis.**—I had been attending, for ten days, a little girl, aged two years and eight months, who had pneumonia in the whole of the left lung, and some bronchitis about the upper part of the right. The temperature ranged between 102° and 103.5° F., and the whole aspect of the child pointed to a rapidly fatal termination. At my evening visit on the tenth day of the disease the temperature was 101.8°; there had been a little diarrhoea and sweating, and the child had taken its egg-flip badly during the day. I left, expecting to be called out that night, and I was at 1.30 A.M. I found the child cyanotic, cold, pulseless, and drawing every now and then a shallow breath. I opened the doors, quickly filled my syringe with liq. strych., and injected 1½ min., with the result that the breathing became deeper and more frequent, the pulse returned, and the cyanosis became less. I rolled the limbs and head up in cotton-wool, and applied hot-water bottles, and asked for some brandy and milk. A fresh bottle having to be opened there was some delay, and I bent over the cot to listen for the breathing; it had quite ceased, though the pulse was beating. I immediately injected

2 minims more of strychnine; the child drew a deep breath, opened its mouth wide, showing a livid tongue, and remained for some two or three seconds in this position; then the mouth closed, and she breathed regularly and deeply, and took some brandy (3 ij.) and milk (3 iv.).

The next day her temperature was normal; she had 4 minims of liq. strych. t.d.s. in place of an ammonia and bark mixture, and alternately with mixture containing perchloride of iron. That night I left 12 minims with the mother, diluted with three teaspoonfuls of water, with directions to give one or two teaspoonfuls if the child became livid. At 11 P.M., the child looking blue about the eyelids and sides of the nose, the mother gave one teaspoonful and opened the doors; the lividity passed off, and now, a week later, the child's temperature has been daily normal; both lungs are practically clear, and it is sitting playing with its toys, but exceedingly feverish.—*Lancet*, April 9, 1892.

#### **Babcock (R. N.) on the Treatment of Acute Croupous Pneumonia.**—

Except in rare cases, of unusually robust and plethoric individuals, in which at the very outset the pulse shows high tension, and dyspnoea is extreme and who, seen early in the stage of engorgement, can be kept under close observation, I should not employ veratrum viride or any other arterial sedative. I should advise a small dose of morphine in combination with atropine, hypodermatically, *e. g.* an eighth or in some instances a fourth of the former combined with one two-hundredth or one one-hundredth and fiftieth of the atropine. This would ease the pain and lessen sense of dyspnoea, without too greatly obtunding sensibility. At the same time I should order an ice bag or ice coil or a cold application of some other efficient kind to the side. This will ease the pain, which is due to the coincident pleuritis, and add greatly to the patient's comfort. In exceptional instances the application of cold is not well borne, but occasions a good deal of nervousness when, of course, its continuance is not advisable. If the bowels are confined it is well to administer a mild dose of calomel or blue pill, followed by a gentle saline. The effect of the mercurial is not only to unload the bowel, but it also diminishes arterial tension, thereby tending to lessen venous congestion. So soon as the temperature reaches or exceeds 103

degrees F. resort should be had to sponging or the ice cradle. According to Fenwick sponging with warm water effects a fall of temperature of about two degrees F., but with a rather speedy return to its original height. This often occurs in about an hour, necessitating a repetition of the sponging. In fact the patient should be sponged every one or two hours. For this reason, as well as because of its continuous employment the ice cradle is preferable. This consists of an ordinary surgical cradle having pails of perforated zinc filled with ice suspended from the central bar, above the body of the patient. It is well to cover the bottoms of these pails with lint to prevent dripping. This apparatus is placed above the patient, who is deprived of all clothing, and only protected by a sheet thrown over the cradle. Thus the body is kept enveloped by an atmosphere of cold, and as a result a gradual reduction of the body heat takes place. The pulse must be kept up with stimulants, alcohol in some form being preferred. During all this period of high fever the nourishment of the patient should receive careful attention, in form of milk, preferably diluted with some effervescing alkaline water, as Vichy, apollinaris, or seltzer, beef tea, strong broths, soups, and it may be an occasional egg-nogg.

With the occurrence of the stage of resolution and lessening body-temperature, the antipyretic measures may be gradually or wholly discontinued. The dietary may be made more generous, and tonics, as strychnine and quinine, administered. Expectorants may now be ordered in most instances with advantage. And of these carbonate and chloride of ammonium are probably the best. Small doses of iodide of potash and ammonium, one to three grains, three or four times a day, have seemed to me very efficacious in liquefying and aiding expectoration.—*No. American Pract.*, March, 1892.

**Taylor (S.) on the Use of Digitalis in Aortic Disease.**—Commenting upon a recent paper in the same journal (Mar. 12th) by Dr. Barr, Taylor argues against some of the points which Barr advanced. The latter's dictum was that digitalis is equally good in aortic and mitral disease. Taylor dissents from this view, claiming that the mechanical conditions are entirely different in the two valves. He says: There is little or no comparison between

the action of the aortic valve and that of the mitral. The strain on the former is, during diastole, much heavier, and more sudden and accentuated, than on the latter during systole. In other words, the closure of the aortic valve is akin to the slamming of a door, the strain commencing from the very moment at which systole ceases, whilst the opposition of the mitral folds is a gradual process, tension on the curtains to any marked extent occurring only at the end of ventricular systole, and is momentary only. And this seems to be more than emphasized by the existence in some of the lower animals not only of one tier but of several tiers of cusps in the aorta to withstand the rebound on the column blood. The *avoids* of about the equivalent to 6 inches of mercury has to be considered in the aortic valve, and this is supported not only in the cusps themselves, but, as Savory has shown (and, notwithstanding the tendency of modern physiology to disturb previously accepted doctrines, this observation still seems to remain true), by the ventricle muscle itself. There is no such mechanism in the mitral valve, and therefore the incompetence of the two valves rests, to my way of thinking, on totally different physical bases. In the one it is always serious and alarming, in the other it may be, and frequently is, attended by only trivial inconvenience. But there are some cases of aortic incompetence in which digitalis may be given with advantage. Dr. Barr speaks of cases of "uncomplicated double aortic disease which have been under his treatment for breathlessness interfering with work." It is within my experience that breathlessness is a more marked symptom in simple aortic regurgitation than when that condition is complicated by mitral insufficiency. But it is precisely in these latter cases, when cardiac failure begins to develop, that digitalis is of service. So long as the mitral regurgitation is present so as to allow of a "safety-valve" overflow digitalis may be given with advantage and with safety. In the cases where there is aortic insufficiency alone, the ventricle has to bear the strain of the return pressure; but given mitral incompetence in addition the over-distended ventricle is relieved by an expansile auricle, and accommodating pulmonary veins and plexus. It is said that this relief may be dearly purchased by a shortened life. Possibly so; but remembering the

uncertain span of life in all cases of aortic insufficiency, remembering that even in the most promising cases sudden syncope may close the scene, I do not quite see how we are justified in thinking that comparative comfort afforded by the addition of mitral regurgitation is a condition not to be desired.—*British Med. Jour.*, April 2, 1892.

**Bruntun (J.) on the Use of Actæa Racemosa in Dysmenorrhœa and Ovarian Irritation.**—I have used it in a series of cases, and always with benefit or cure; whether the dysmenorrhœa is of uterine or of ovarian origin its action is the same. It practically abolishes pain at those times, when the pain and discomfort of dysmenorrhœa make the patient's life a burden to her. Its use gives a freedom from distress, a comfort and relief, that the patient is usually not slow to tell of; where she has been previously confined to bed, she can afterwards continue her usual duties.

Besides its anodyne action, its special and tonic effect on the uterus and appendages is often most marked. In some cases it may replace ergot with the utmost advantage, as in metrorrhagia. Combined with iron I have often used it with decided benefit in the amenorrhœa of early girlhood, the quantity of the flow gradually increasing under its administration. It is best given in 20-30 minim doses, thrice a day, four days previous to the usual time that the flow makes its appearance.

In the cases of ovarian irritation and puerperal depression and melancholia, it has simply to be tried to be regularly adopted. Where there is a gnawing pain in the ovaries, pain more or less constant in the back, weariness and mental depression, a few doses of actæa remove the pains, give a feeling of relief, and brighten the mental sky of the sufferer, making her feel, in her own words "a new woman."

The conclusions I would draw from its use are these:

It is certainly anodyne, and may with advantage take the place of bromides and opiates for dysmenorrhœic pain. In addition it has a direct action on the uterus, causing an increase of the menstrual flow in scanty menstruation.

The best way to administer it is to give 30-minim doses of the tincture thrice daily, commencing four days before, and continuing over the period.

In metrorrhagia and menorrhagia it is

beneficial as a regulating agent, though sometimes disappointing. In ovarian pain and nervous depression it is invaluable and almost a specific.—*Practitioner*, April 1, 1892.

**Wells (H.) on the Treatment of Gonorrhœa.**—In the early stages of acute gonorrhœa of the anterior urethra, I have had satisfactory results from the following method of treatment: The patient is directed to close the meatus with his fingers, and then to try to pass water. As soon as the urethra is thoroughly distended, the fingers are removed, and the rush of urine thoroughly clears the canal. I then inject a solution of bichloride of mercury, 1 to 1,000, or 1 to 2,000, having it retained for a few minutes. The amount of pain caused determines the strength of solution to be used. This is repeated daily, or on alternate days, for a week. After the injection the smarting should not continue more than an hour.

At night I use pure hot water, or medicate it with laudanum, two fluid drachms, or lead acetate, four grains to the ounce of water. If there be chordee, a very rare thing under this treatment, I direct the patient, before retiring, to immerse the penis in hot water for twenty minutes, and then administer a full dose of bromide and chloral, thirty grains of each. At the end

of the week the bichloride is discontinued, and the medicated hot water used.

Should the case continue over a month, tender spots are searched for, the urethra is thoroughly dilated, and iodoform is applied to the surface on alternate days.

If the posterior urethra be involved, ordinary injections seem useless. In these cases, after clearing the urethra, I pass a catheter behind the triangular ligament, and use weak solutions of bichloride, 1 to 4,000 or 1 to 5,000. I prefer to charge a soft catheter with iodoform and vaseline (ten grains to one ounce), pass the eye of the instrument behind the ligament, and then force out the iodoform by means of a piston. Sometimes zinc sulphate is substituted for the iodoform.

In all cases of gonorrhœa I carefully regulate the bowels, and direct the patient to drink water freely. His diet is restricted, especially as to meat, and he is obliged to spend much time in bed.

Internal medication has generally disappointed me, so that I rarely depend on it. I have never seen orchitis or cystitis follow these injections of bichloride, though such cases are reported.

The average duration of treatment is from four to six weeks. At the end of this time the patients are definitely cured.—*Therap. Gaz.*, March 15, 1892.

## REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY A. T. MUZZY, M.D.

### Pomeroy (O. D.) on the Value of Accurate Tests of Hearing in the Diagnosis of Certain Ear Affections.

—The hearing tested carefully as to its quantity and its modification by certain procedures is a valuable diagnostic symptom in chronic middle-ear catarrh, aural vertigo, tinnitus aurium and labyrinthine disease. In middle-ear catarrh, if inflation improve the amount of hearing, it is fair to infer that there has been impaired function of the Eustachian canals. But not always, namely, a very strong inflation temporarily improves the hearing, but on a movement of the head which reopens the canals this air rushes out and deafness returns; here there was doubtless impaction of stapes in oval window and adhesions of drum to promontory, but the violent inflation temporarily brought the drum nearer to its

normal position. Again, if a stuffy, full feeling or veiled, covered feeling be present, improvement of the hearing by inflation denotes generally a sunken drum membrane. If the hearing is unaffected, and leeches, cups, fomentation, or other antiphlogesis improves the hearing, there has been hyperæmia of the drum cavity. Improvement of hearing after inflation in aural vertigo would indicate labyrinthine pressure from sunken drum membrane. In tinnitus the hearing test may soon give the cause. If it disappear after inflation and the hearing improve, the cause is the sunken membrane. There is no absolute test of normal hearing. From various experiences one is led to conclude that all the hearing that can be got in a given case is not more than normal. Where one ear hears less than its fellow, it is below normal. Such a diag-

nosis is valuable when, without particular outward or objective symptoms, abnormal sensations are complained of. In such cases careful measurement of the hearing shows 20" for the watch with one ear, but only 15" with the other, and inflation improves the worse, or even both, proving a diseased condition. If the patient have pure middle-ear disease, hearing better in a noise is a marked symptom. In this condition it almost always is found that, except where too much affected, the diseased ear will hear better in a noise than the normal ear; the explanation being that the normal ear is confused and overpowered by the excess of noise. When a patient hears certain sounds better than others, it is generally regarded as an evidence of labyrinthine disease, but not always. Another condition in which the amount of hearing present is diminished is the following. One hard of hearing may have this small amount grow less by continued strain to hear low tones. A partially deaf medical man after using an earphone to help in attending lectures found all hearing disappear. A part certainly of the condition known as boiler-makers' deafness depends on fatiguing the nerve of hearing by continued concussions of loud sound. And, as is well known, if the cause is removed sufficiently early, the hearing is restored. Many who suffer from chronic middle-ear catarrh maintain that if words are spoken sufficiently slow they have no difficulty, but that rapid speech mixes and confuses sounds. This is due doubtless to lowered muscular vitality and activity of the ear. Diplacusis or double hearing, whether monaural or binaural, seems to depend on increased intra-labyrinthine pressure.—*Annals Ophthal.*, Kan. City, April, 1892.

**Fernandez Santos (of Havana) on Absence of Trachoma among Negroes.**—Dr. Knapp, of New York, and Dr. Swan-Burnett declare that the negro race is not subject to *trachoma*, while Dr. Lopez, from a study of some cases of the disease in Cuba, opposes this statement. The author offers his experience towards clearing this question. He has had an ophthalmic clinic in Havana since 1875, amounting to 25,800 eye patients in six years. It has been accepted for a long time that the negro is predisposed to some diseases, and in exchange is refractory to others. In general, affections of the conjunctiva occurred with nearly equal fre-

quence in white and black. Scrofulous conjunctivitis is much more frequent in the colored race. In general, all strumous affections are more frequent in the blacks. The little difference noted in ophthalmia neonatorum, episcleritis, and pericorneal hypertrophy of conjunctivitis, was considered as purely accidental. But when *trachoma* is studied, while there occurred forty-four cases among whites, not one has been recorded among the blacks, though for proportion's sake there should have been eighty. When the author drew the attention of the Ophthalmological Congress in 1876, at New York, to this fact of the immunity of the black to *trachoma*, Dr. Noyes doubted the general claim, stating that in New York *trachoma* did occur among people of color. Although the claim is not made that the negro cannot have *trachoma*, but rather that the author has never seen such a case. They can have granulations, but this is perfectly distinct from *trachoma*. It is impossible to confound the characteristics of a true *trachoma*. It is a sort of habitually chronic conjunctivitis, subject to exacerbation and remission, and that in general persists for a certain number of years. And the result of which is a more or less great loss of substance combined with cicatricial tissue. As it forms from four to six per cent. of all eye diseases in the state yet does not affect colored people, it can hardly be considered as a local trouble but rather a constitutional taint. For a good number of years the author has been of opinion that the disease is a tubercular malady. Neither does he admit of a distinction into two diseases of granular conjunctivitis and *trachoma*, but the rather believes that these are expressions of the same disease under modifications of country and other causes, some yet unknown. Out of the 25,800 cases of eye diseases seen, 689 were granulations and *trachoma* united. Of these 10 occurred in the black, and 26 in mulattoes, none of which verified as *trachoma* pure. *Rec. d'ophtal.*, Paris, July, 1891.

**M'Achran (J. J.) on Laceration of the Internal Rectus.**—While fencing, a gentleman received a thrust from a foil, the foil button striking the inner canthus of the right eye. The eye was rotated outward and upward. Under cocaine exploration showed complete section of the internal rectus and partial severance of the inferior. By means of a pulley stitch the divided

ends of the internal rectus were brought together. Vertical diplopia remained after this operation, and was remedied by exercise with prisms.—*Am. Four. Ophthal.*, Nov., 1892.

**Bourgeois (A.) on Traumatic Rupture of the Inferior Rectus Muscle of the Right Eye.**—A man sixty-four years old presented his right eye for treatment. Three weeks before, he had fallen, striking on the angle of a wooden box. This angle had hit a single point on the inferior orbital ridge in the region of the rectus inferior. The eye presented the signs of traumatism—redness, a little grisly lump over the insertion of the tendon of this muscle the size of a large pea, covered by conjunctiva. In the movements of the eye this swelling came against the lower lid and seemed to limit its movement downwards. When looking forwards the left pupil was just beneath the ciliary border of the upper lid, while nearly all of the right or injured eye disappeared under the upper lid. To avoid trouble in vision, the patient slightly raised the head but did not attempt to lift the eyelids. The ophthalmoscopic examination demonstrated the fundi as normal. When the patient made sufficient effort he raised the lids but complained of vertical diplopia. Correction was sought by section of the rectus superior. Movement was then limited upwards and downwards, but by slightly lowering the head the sound eye gained focus with it.—*Rec. d'ophthal.*, Paris, July, 1891.

**Bourgeois (A.) on Two Grave Traumatisms Healed by the Suture of the Cornea.**—I.—A cellarer of champagne wine was hit in the left eye by a piece of glass from a bottle. When seen

one hour afterwards there was a Z-formed cut through the vertical diameter of the cornea, reaching 3 mm. beyond sclero-corneal border, with a triangular flap at the lower end. The iris was imprisoned in the upper end of the cut, and corresponding to the triangular flap of cornea was a rectangular flap of iris. The capsule of the lens was torn, but the lens was in position. The globe was soft but not collapsed. The slightest pressure brought a bead of vitreous to the surface of the wound. Enucleation was not permitted. So under antiseptic bathing the flap of the iris below was trimmed off, and that above released and returned to the anterior chamber. Then three stitches were taken; one at the highest angle in the wound, about the middle of the cornea, and one at middle of each side of the triangular flap, with OO catgut. Reunion of the wound was complete by the third day without pain or suppuration. Eight months after there was a cicatricial leucoma, but clear cornea above and below, synechiæ of iris and wound, with very shallow anterior chamber. There is perception of light, though some slight diminution in bulk of the globe.

II. A farmer was struck in the right eye by a scale of iron while watching his horse shod. Five hours after, the eye presented a complete curved section of the cornea, with a secondary cut forming a triangular flap at the upper end of the wound. The blow has formed an iridectomy above and below; the slightest pressure would drive out the lens. The globe though soft has some consistence. The upper lid is also cut. In this case a single stitch was taken just below the apex of the triangular flap. Recovery prompt without suppuration or pain.—*Red. d'ophthal.*, Paris, Nov., 1891.

## REPORT ON SURGERY.

BY GERTRUDE B. KELLY, M.D.

**Thomson (T.) on a Case of Congenital Obliteration of the Small Intestine.**—When the mother was about two months pregnant she had a left ovarian cyst removed by laparotomy. The operation was not a complicated one. Shortly after it, she had a threatening of miscarriage, which was successfully treated by large doses of morphia. After that everything went well until full term. The birth was easy and natural. There was an ex-

remely large quantity of liquor amnii, and an unusually thick layer of vernix caseosa. The child's extremities were noticed to be very blue, and his body of a brighter red color than usual. After birth he vomited everything given to him (milk and water and four doses of castor-oil); no motion of any kind from the bowel. The skin gradually assumed a distinctly yellow tint. The child was well developed, and of natural size, the conjunctival only slightly



yellow. The lips, the scalp, the palms, the soles, and the neighborhood of the anus were markedly cyanosed, and there was a bluish tinge over some other parts of the body. The child cried constantly, as if from hunger. There was no external malformation. The thorax was well shaped, but there was considerable indrawing of the episternal and epigastric regions with each inspiration. The percussion note over the bases of the lungs was not very clear. The examination of the heart revealed no abnormality. The abdomen was not distended, but its walls were very tense. On percussion, a tympanitic note was got over the region of the stomach, but over the lower part of the abdomen the note was absolutely dull. The liver and spleen could not be felt. The anus seemed small, but admitted the little finger without much difficulty, and a few soft, rounded masses were felt. These, when removed, were found to be without odor, and of a whitish color, with no tinge of green or yellow. When the rectum was cleaned, the little finger could with some difficulty be passed up about two and a half inches. The urine was passed freely. At first it was said to have been clear, but later it was thick and dark, and there was considerable brick-dust deposit. The child lived ten days and four hours.

On post-mortem examination the body was found extremely emaciated, the skin slightly but distinctly jaundiced; no obvious cyanosis; rigor mortis considerable; dark-green discoloration over the left side of the abdomen. On opening the abdomen, a large tumor, of a purplish-red color, was found to occupy the greater part of the left half of its cavity. This was found to be the distended portion of gut just above the seat of its obliteration. The rest of the bowel was found to be contracted to its fullest extent, and was of a pale-yellowish color. The surface of the peritoneum was smooth and glistening, and, with the exception of the narrow band, to be afterwards described, no signs of peritonitis, either old or recent, could be found. The liver was somewhat large, very congested, but otherwise normal to the naked eye. The gall-bladder was normal in appearance, and was filled with dark bile. The cystic duct seemed normal and permeable, but was unusually long. The hepatic and common ducts were also pervious, and apparently normal. The pancreas, spleen,

and mesenteric glands were normal. The kidneys were congested, showing extremely copious uric acid infarcts in the pyramids. The œsophagus and stomach were normal. At the very beginning of the duodenum the gut became enormously dilated. The dilated portion measured ten inches in length and from one to one and a half inches in diameter, and is of a dark purplish-brown color. It comprised the whole of the duodenum, and probably also a few inches of the jejunum. Its lower extremity was an abruptly rounded end; it was perfectly closed, and there was a gap between it and the next portion of the bowel. The mesentery belonging to it also comes to an abrupt end, there being a deep fissure between it and that of the succeeding piece of intestine. The blood-vessels in the mesentery were very unusually large. When the distended duodenum was opened, it was found to be full of turbid yellowish-brown fluid. A short distance from the dilated portion of bowel was a small bit of gut  $1\frac{1}{2}$  inches in length and  $\frac{1}{2}$  inch in diameter. It was blind at both ends (which were rounded) and fixed in the shape of a horse-shoe by a little tongue-like flap of mesentery. When the mesentery was followed to the right, its free margin was found to be thickened in places by what appeared to be fragmentary remains of obliterated bowel, and it was prolonged into a peaked flap horizontally. From the point of the flap a small, rounded, fibrous band passed in among the neighboring coils of intestine, and, after encircling the mesenteric attachment of a large portion of the bowel, was fixed by a fan-shaped end into the middle of the upper surface of the mesentery of a coil of jejunum about 7 or 8 inches below the lowest point of obliteration. This fibrous band was 1 inch in length, very dense in texture, and resembled fine silk-worm gut in size and appearance. The small intestine became pervious again about  $2\frac{1}{2}$  inches below the horse-shoe-shaped fragment. During the rest of its course it varied in diameter from  $\frac{1}{2}$  to  $\frac{3}{4}$  inch. In one or two situations the lumen was seen to be occupied by small masses of green matter; elsewhere it seemed quite empty. The large intestine was similarly contracted, measuring only about  $\frac{1}{2}$  inch in diameter, and was in a similarly empty state.—*Edinburgh Med. Jour.*, March, 1892.

**Albert (E.) on Spontaneous Rupture of Hernial Sacs.**—Non-traumatic bursting of hernial sacs is a rare accident. I have three such cases to record. The first was in a female who had an uncommonly large right-sided female hernia, which had become phlegmonous repeatedly. On these occasions it was demonstrated before the clinic, where the sac discharged for a long time a serous and somewhat gluey fluid in large quantity. After the inflamed coverings were relieved of the fluid, the perforated sac closed up, to re-open on a future occasion. The second case was in a woman, aged sixty, who had suffered for twenty-eight years from an umbilical hernia, which was about the size of a man's head, somewhat irregular over the surface, perfectly irreducible, but softer and smaller in the morning. Over the right side a narrow region of the surface was tympanitic; in the upper part peculiar ridges and channels could be felt along the margin of the swelling, conveying to the mind the impression that the coverings were perforated, and between these channels the parts seemed to fluctuate. Over the most projecting portion of the hernia the skin was ulcerated in two places, presumably from rubbing on the truss. In the neighborhood of this ulcer a small red swelling commenced to form, which continued painful until it broke. It continued for five days to discharge a clear glutinous fluid, after which it rapidly closed.

The third case occurred in a man, aged sixty, a potator, who suffered from cirrhosis of the liver and severe ascites. Along with this malady there existed a large umbilical hernia, which increased regularly in the same proportion as the ascites till its surface became so thin that it burst, and the fluid was discharged in great quantities, reducing the ascites as well as the hernia. The opening was dressed with iodoform gauze, and large quantities of fluid continued to be discharged for fourteen days. In this case no inflammatory process had preceded or accompanied the bursting of the hernia.—*Med. Press*, Feb. 3, 1892.

**Percy (J. F.) on Amputation of the Breast, with an Unusual Accident.**

—On attempting to close the wound after an amputation of the breast and removal of the axillary glands for scirrhus carcinoma, it was found difficult to bring the edges together. Use was made of silver

tension sutures with lead bottoms. By a good deal of pulling it was possible to bring the edges within half an inch of each other, but almost immediately the patient became blanched, the respiration faint and shallow, and the pulse almost imperceptible at the wrist. The tension suture, which had been partly fastened, was released, and immediately the signs of life returned. To test the matter the suture was again tightened, with exactly the same result. By means of a double row of chromicized gut ligatures it was possible to unite the wound in nearly its whole length, a gap of about one half an inch being left for two inches.—*Med. and Surg. Rep.*, March, 1892.

**Morris (Robert S.) on Removal of Necrotic and Carious Bone with Hydrochloric Acid and Pepsin.**—An opening is made through the soft parts by the most direct route to the seat of dead bone, and if sinuses are present they are, if possible, all led into one large one. The large direct sinus is kept open with antiseptic gauze, and the wound allowed to remain quiet until granulations have formed. Granulation tissue contains no lymphatics, and absorption of septic material through it is so slow that we have a very good protection against cellulitis. The next step consists in injecting into the sinus a two or three per cent. solution of hydrochloric acid in distilled water. If the patient is confined to bed, the injection can be made at intervals of two hours during the day, but if it is best to keep him up and about, the acid solution is thrown into the sinus only at bedtime. In either case the patient is to assume a position favorable to the retention of the fluid. Decalcification takes place rapidly in exposed layers of dead bone, and then comes the necessity for another and very important step in the process. At intervals of about two days an acidulated pepsin solution is thrown into the sinus (I use distilled water, f. ʒ iv., hydrochloric acid, ℥ xvj., Fairchild's pepsin, 3 ss.), and this will digest out decalcified bone and caseine or fatty *débris* in about two hours, leaving clear dead bone exposed for a repetition of the process. The treatment is continued until the sinus closes from the bottom, showing that the dead bone is all out. Even in distinctly tuberculous cases the sinuses will close if apparatus for immobilizing diseased parts, and tonic constitutional treatment are employed, as they should be, in conjunction

with an effort at removing the dead bone. If suppuration is free in any cavity in which we are at work, it is well to make a routine practice of washing out the cavity with peroxide of hydrogen before each injection.

If we use a two- or three-per-cent. solution of hydrochloric acid, a wall of lymph and of granulation tissue is thrown out upon the surface of living bone for protection, and only dead bone is attacked. This at least has been my observation in several cases in which the results of treatment could be easily watched.—*N. Y. Med. Jour.*, Mar. 19, 1892.

**Martin (Francis C.) on Wound from Whip-Lash Simulating Bullet-Wound.**—A wagon-driver presented himself with an enormously swollen under-lip, and the following history: Late in the evening, he was driving through Dover Street, past a dense crowd of people. He struck his horse with the whip, and at the same instant there was a sharp report, and he felt a stinging pain in the chin. He found a wound in the chin, and another smaller one inside the mouth at the base of the lower lip. The next morning the whole lip was very much swollen. On passing a probe inwardly from the outside of the face, I found a passage through into the mouth at the smaller wound. The probe rubbed against some hard substance *in transitu*. All the appearances indicated a severe bullet-wound. On making a free incision from the inside wound I cut down on the foreign body, and with bullet-forceps removed a black mass, about as large around as a lead pencil and over half an inch long. I at once exclaimed: "You were shot from the crowd!" On dropping the object, however, from the forceps into a basin of water, it went rather slowly to the bottom, without any "thud." I then examined it carefully and found it was a piece of the whip itself.—*Bost. Med. and Surg. Jour.*, Mar. 17, 1892.

**Innominate Aneurism; Ligature of the Subclavian and of the Common Carotid; Both Femorals Ligatured Some Years ago in the Same Subject for Popliteal Aneurism.**—The man on whom Mr. McKellar operated was a police constable, aged thirty-four; he had also been a professional runner, had served in the Dragoon guards, and had seen active service in Egypt. There was no history of syphilis. About four years

ago he had a fall; soon after a lump appeared in the right popliteal space, and a month after the accident the superficial femoral was tied by Mr. McKellar (silk ligature No. 4 being used, without rupture of the arterial coats); this cured the aneurism. More than a year had elapsed when he was again admitted into the hospital with a popliteal aneurism in the left side. On this occasion there was no history of any accident, but there was considerable pain in the knee. Constitutional treatment was tried, and also pressure, but eventually the superficial femoral on the left side was tied by Mr. McKellar in the same manner as on the right, and the aneurism cured. Since then he had performed all the duties of a policeman, latterly as a mounted man. Whilst patrolling on Lord Mayor's day his horse came down with him, the weight of the animal falling on the man's chest, and in about two months a swelling appeared. Some three months after the accident he was admitted into St. Thomas' Hospital, the swelling being pulsating. Medical examination revealed no sign of any dilatation of the aorta, and the case was diagnosed as one of innominate aneurism. As the tumor was increasing rapidly it was decided to tie the subclavian and the common carotid. The subclavian was tied in the third part of the course, two silk ligatures were used, and the artery divided between them. Some difficulty was experienced in securing the artery, owing to the clavicle being pushed up, and owing to the close proximity of the aneurismal sac which extended outwards. A ligature was then put around the common carotid near its bifurcation, the operator getting down to the omo-hyoid, and taking the artery as high up as possible. The vessel was secured by a stay-knot, which consists of two floss silk ligatures put on side by side; these are each tied in the first part of a reef-knot, slight traction being used so as to exclude the artery without rupturing its coats; the four ends are then tied together into the second part of the reef-knot.—*Med. Press*, Mar. 2, 1892.

**MacCormack (Alex.) on a Case of Leaking Ilio-Femoral Aneurism; Ligature of the External Iliac Artery, and "Old Operation."**—Seven years ago, patient, who was a small, spare man, was thrown from a horse, and shortly afterwards a swelling appeared in the position of the present one, but it was very

much smaller, and after a month's treatment by rest and iodide of potassium it disappeared. After that he was perfectly free from any trouble until about five months ago, when, while at work, he felt a severe pain in the left groin like the prick of a sharp instrument. In a week a swelling appeared, which has gradually increased up to the present time. On examination there was found to be a swelling in the left groin about the size of a large fist. It was regular in outline and smooth on the surface. The skin covering it was shiny, and of a dusky, swarthy color. On careful observation visible pulsations could be detected. The swelling was situated in the line of the common femoral artery and extended up considerably under Poupart's ligament. The region of the ankle on the same side was somewhat œdematous, and the tibial pulses were soft. There was no history of syphilis, gout, rheumatism, or intemperance.

Under chloroform a curved incision with the concavity upwards was made from a point one and one quarter inches directly internal to the anterior superior spine of the ilium upwards and outwards for about three and one half inches. The various structures forming the abdominal wall were successively divided until the extra peritoneal tissue was reached. The tissue in the wall of the abdomen corresponding to the lower half of the incision was œdematous. All bleeding having been stopped, the peritoneum was elevated from the iliac fossa. On account of the aneurism pushing the artery back, and on account of the incision being made farther out than usual, the vessel was hard to reach. After tearing a hole in its sheath with two pairs of forceps, it was encircled with a ligature, which, when tied, caused all pulsation to increase in the aneurism. Next, a vertical incision was made into the aneurism sufficiently large to admit one finger immediately slipped into it. The finger was placed over the opening into the aneurism, and bleeding from below was controlled by digital pressure in the vessel below. With a probe-pointed bistoury the sac was laid open upwards and downwards and the contents rapidly turned out. There was very little "active clot," the greater part of the contents being fluid blood. The original sac could be seen forming the posterior wall of the aneurism. An assistant was directed to push his finger into the

upper opening; then the vessel was cleaned and ligatured above and below the opening into the sac, as much of the sac as possible was cut away, and some few bleeding points stopped. The wounds were sutured with horsehair, drainage-tubes were inserted, and the usual antiseptic dressings applied. The whole of the limb was thickly enveloped in wool. Convalescence was rapid and uneventful. The upper wound healed by first intention; the lower kept filling up with serum during the first seven or eight days, and then gradually dried up.

The usual line of incision had to be altered in this case on account of the extent of the aneurism. The "old operation" was performed after ligature of the external iliac, on account of the skin threatening to give way at one spot. This was considered the safer course, for if left, the aneurism would probably have suppurated. The aneurism originated in that part of the artery situated on the brim of the pelvis, and the vessel was tied in three places. Yet there was not the slightest inconvenience from the disturbance to the circulation.—*Australasian Med. Gaz.*, Jan., 1892.

**Eagle (T. B.) on Removal of a Sub-maxillary Calculus Weighing Eighteen Drachms Avoirdupois.**—A prisoner, aged forty-seven years, of somewhat full habit, rheumatic diathesis, complained of sore throat. A hasty examination revealed some inflammation of the tonsils. Quinine and a gargle were prescribed. The third day the patient had become considerably worse and was unable to swallow. On thorough examination, a calculus of considerable size, though how large could not be determined, was found in the left sub-maxillary region, under the tongue and well back on the posterior portion of the submaxillary gland. The exposed end was freely movable, and seemed to project downwards back of the mylohyoid, pressing upon the upper border of the thyroid cartilage. An operation was of course necessary, but to reach the calculus from the inside seemed almost impossible, and an external section was not to be thought of in the condition the patient then was. I had our prison blacksmith forge a pair of long, peculiarly curved vulsellum forceps, though while waiting for them the patient several times came very near choking, owing to spasm of the glottis, induced by the pressure of the calculus

upon the parts, permitting the mucus and saliva, which the patient was unable to eject, to enter the larynx.

The patient was placed in the operating chair, the tongue raised and drawn aside; then, with a long camel's-hair probang, the affected tract and surrounding parts were brushed three or four times with an 8-per-cent. solution of cocaine; the forceps were then inserted and the exposed end of the

calculus grasped between the sharp points which turned inward; no knife was used, though considerable traction was necessary to tear the foreign body from its attachments and lift it out. Slight hemorrhage followed, which soon stopped. The cavity was then thoroughly cleansed with antiseptic solution and the patient put to bed. In eight days the cavity was entirely closed. —*Occidental Med. Times*, Feb., 1890.

## REPORT ON OBSTETRICS.

BY ELIZABETH ADAMS, M.D.

**Barnum (E. E.) on Transverse Presentation with a New Method of Treatment.**—Attempts to perform version were futile, as the uterus was in a state of tonic contraction, shoulder and side of the head being firmly wedged within the pelvic brim when medical aid reached the case, about twenty-four hours after the beginning of labor. The patient was placed on her knees at the edge of the bed, her head gradually lowered until it nearly touched the floor. She was instructed to breathe rapidly. Soon the foetus began to withdraw from the superior strait: and in about five minutes the arm was replaced. With the next pain the head presented, the descent of the arm prevented by a finger in the vagina, and in fifteen or twenty minutes the child was born *alive*.—*Buff. Med. and Surg. Jour.*, Feb., 1892.

**Whitman (Z. L.) on Premature Labor and Abortion.**—In these cases we must always have counsel. It is decided that the operation is necessary. Then introduce a large size sponge tent into the neck of the womb early in the morning and begin at once, giving her twenty-five drops of Squibb's fluid extract of ergot every two or three hours, day and night, till the pains become quite distinct, then give her one more dose and await results. Should the os expand so as to allow the tent to fall out, insert another. Treat all symptoms as they appear. Should the pains become very severe towards the close, chloroform by inhalation or morphine hypodermically may be administered. I find that at the last stages an injection of from  $\frac{1}{4}$  to  $\frac{1}{2}$  grain will allay the misery but not retard the contractions, and gives better results than chloroform. Should the contractions slack, begin again on the ergot.

When it has gone so far that there is no danger of the contraction ceasing you need not keep a tent in the os. Clean the parts thoroughly after the labor is over, and continue a douche of two quarts of warm water with one tablespoonful of boric acid every four hours. Give three grains of quinine every five hours, both of which should be continued for five days. Should she complain of pain in the pelvic region after the labor, then give powdered opium and keep her in horizontal position with warm applications of turpentine and lard over the abdomen. If gestation had progressed beyond the first of the fifth month the breasts may need drying up. For this, apply on cloth pads—with a hole for the nipple—a paste of blue mass on which you may sprinkle the following:

Atropine sulphate . . . . .	gr. iij.
Aqua rosa . . . . .	oz. ij.
	M.

and watch the eyes as a guide to the effect of the atropine. Treat inflamed breasts early and persistently.—*No. Am. Pract.*, Feb., 1892.

**Manton (W. P.) on Abortion: Its Immediate and Remote Effects with Reference to Treatment.**—In case of an inevitable abortion a bivalve speculum is introduced and the vagina thoroughly cleansed. With a tenaculum in the cervix a strip of bichloride or iodoform gauze, one half inch wide and from one to three feet in length, is packed into the cervical canal excepting the last two inches. Another strip of gauze is then carried into the vagina. Repacking is desirable at the end of twenty-four hours. Should the ovum still adhere to the uterine wall it may be removed by a combination of fingers and instruments, using Thomas' sharp curette

and the forceps devised by Dr. Longyear. After gently scraping the uterus, an intra-uterine douche of carb. ac. or creoline is given, and the vagina tamponed with iodoform gauze.—*American Lancet*, Feb., 1892.

**Skene (A. I.). Diagnosis of Pregnancy in the Early Months.**—Dr. Skene, in the discussion following a paper by Dr. Jewett on "Diagnosis of Pregnancy in Early Months," says:

First, in addition to the elasticity or softening of the uterus and its change of form, there comes with that a difficulty of mapping out the uterus. It is exceedingly difficult to outline it in some cases, and that very fact is of great value, because anything else which is likely to simulate pregnancy is more clearly defined because denser, as a uterine fibroid, subinvolution, a distended Fallopian tube, or an ovarian cyst, for instance. More than that, in the early months of pregnancy the uterus grows out of proportion to its surroundings, and so its mobility, or the facility with which it can be displaced, is lessened. You will find it is more difficult to raise a pregnant uterus up out of the pelvis or toward the superior strait than in any other condition—than in cases of most, not all, small fibroids which enlarge the uterus, or subinvolution, which does the same thing. This partial fixation is rapidly overcome in the latter months of pregnancy, especially after the third month, when the function of development of the uterine ligaments is taken up and goes on rapidly.

The second sign which I would mention is the color of the mucous membrane of pregnancy, which is different from everything else—nothing simulates it. It is present in a lesser degree in ectopic gestation, but in normal gestation this color of the mucous membrane is not simulated by any marked condition that I know of. That peculiar bluish-violet hue, if seen a few times, is easily recognized afterwards, and becomes of the greatest possible value, and I depend very largely upon it. Of course it requires a careful speculum examination in order to see it, but it is worth the trouble in doubtful cases.

The third sign is the peculiar secretion in the cervix. There is a difference between the secretion in the cervix of the pregnant uterus and that of any other pathological condition. In the pregnant uterus the cervical secretion has a whitish,

opaque appearance, that at first sight is very much like the leucorrhœal discharge in a case of muco-purulent cervical endometritis, but careful examination proves that it is not, because it contains pus, which gives the opaque appearance, while in pregnancy opacity is due to the coagulation of the albumen by the secretions of the vagina. That is characteristic of pregnancy and occurs in no pathological condition, and is almost always present.—*Brook. Med. Jour.*, Feb., 1892.

**Bennett (T. J.) on How to Prevent After-Pains.**—After the third stage of labor the uterus is commonly globular in shape, owing to the fact that the circular fibres of the os do not contract so firmly as those higher up because of the temporary paralysis from pressure and distension. To stimulate this portion of the uterus to action, introduce two or three fingers into the vagina and gently manipulate this portion of the uterus in such a manner as to secure as nearly as possible the closure of the cervix. As hemorrhage, barring laceration, is from the placental site, and this point is generally the fundus, and since additional force is secured to the fundus by causing contraction of the vaginal portion, the danger of post-mortem hemorrhage is diminished, lochial discharge abbreviated, and tedious after-pains obviated.—*Tex. Med. Jour.*, Jan., 1892.

**Bagol on a Case of Dystocia Due to a Cyst in the Liver of a Fœtus.**—Second pregnancy. Patient had been in labor thirteen hours when the head was born without difficulty, but the body delayed expression and traction failed. Chloroform was given. Abdominal palpation showed the uterus much larger and more tense than at term, and a distinct fluctuating thrill could be felt. Abnormality of the fœtal abdomen was suggested. After thorough disinfection Dr. B. passed his hand up along the anterior surface of the child, and perforated the fœtal abdomen close to the xiphoid cartilage. A yellow fluid poured out, mixed with liquor amnii, and the child was easily delivered. The left lobe of the liver of the fœtus was converted into a simple cyst with a fluid capacity of forty-eight ounces, right lobe comparatively normal.—*Dub. Med. Jour.*, Nov., 1891.

**Brady (E. J.) on an Alarming High Temperature Immediately after Labor.**—At four and a half

months in fourth pregnancy—the case reported—patient had mild typhoid with complete recovery. A few days after leaving her bed she began having “shiverings daily with pain in her legs.” This continued for two weeks. Child was born at seven months, healthy, placenta expelled, no hemorrhage, labor unusually rapid. But at the close the “patient’s teeth were chattering and her writhings shook the bed.” The uterus was well contracted. Temperature in the axilla was 105.4° F., otherwise her condition seemed normal. Antipyrine, gr. xx., given. A few hours later temperature 101° F.; at noon and evening of same day temperature 98.4°. Recovery uneventful.—*Med. Press*, March, '92.

**Hektoen (L.) on Instantaneous Death from the Entrance of Air into the Uterine Veins, during a Vaginal Douche in the Fourth Month of Pregnancy.**—The author gives the following explanation of the post-mortem condition :

The fact that no air was found in the uterine sinuses themselves, in the venous plexuses around the uterus, or in the vena cava suggests that all the air forming the embolus in the right heart entered the circulation *en masse*, and nearly or entirely at one time, *i. e.*, a certain quantity of air was introduced into the veins and then the supply ceased. This air reaching the right heart caused speedy and instantaneous death before but a minute portion of it had time to pass through the pulmonary circuit into the systemic arterial circulation. The introduction of sufficient air into the uterus

to accomplish this result under favorable conditions might easily be done by the intentional or accidental intra-uterine injection of a few bulbful of air, or air and water, by means of an ordinary so-called Davidson’s syringe. That this is what actually took place in this case seems very reasonable. A perfectly healthy pregnant woman takes a vaginal douche with a bulb syringe which is imperfect and leaking, and she dies almost instantaneously. The section shows an intact and normal cervix and vagina, ruptured foetal membranes, partial separation of the placenta at its lower margin, and a large quantity of air in the right heart. The tearing away of the foetal membranes so completely seems to point to forcible injection into the uterus of water, mixed or not with air. It is difficult to believe that the woman could, unaided, by mere accident introduce the point of the syringe into the cervical canal, but then such an occurrence is not at all impossible, and, on the other hand, it is not necessary that it should have been done, because the placing of the point of the syringe against the cervix uteri in such a way as to bring the orifice of the point in a direct line with the cervical canal would result in the intra-uterine injection of the contents of the syringe. Immediately following this injection intermittent uterine contractions commenced, causing a partial separation of the placenta and some hemorrhage, the large vascular spaces in the muscular wall of the uterus being torn open. The uterus then relaxing, the air presumably came into the uterine cavity from the syringe.—*Selected*.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

### Abortive Treatment of Syphilis—

The article refers to the different views of those who advocate excision of the primary lesion and those who claim that it is actually useless.

It advises, for the sake of clinical evidence, rather than from any confidence in the method, to try to abort by the excision of the chancre, and observing and recording such cases where the indications expressed by Leloir are present, namely, when the lesion is observed in its early state, and is so situated that the operation

is easy and not attended with subsequent deformity, where no adenopathy has developed, where there is a single lesion, or, if there is more than one, where they all readily can be removed, where there is no serious constitutional dyscrasia or disease. Fournier’s principles should be borne clearly in mind, namely : (1) the woman from whom the man operated upon contracted his disease must be proven to be syphilitic ; (2.) an incubation of from two to four weeks must be clearly demonstrated ; (3.) the case must be completely reported,

and the excised lesion must be proven to be a syphilitic chancre; it must also be proven that the patient has not been previously syphilitic. Furthermore the patient must be kept under prolonged observation, without the administration of mercury or iodide of potassium.—*Leading Article, Therapeutic Gazette*, April 15, 1892.

**A Syphilitic Woman: Can She have Given General Paralysis to Three Students?**—M. Morel-Lavalée reported a case of a syphilitic woman who contaminated five students; three have since died from general paralysis. He asked, apropos to this, if the quality of the germ had not an importance in the evolution of syphilis. The case was discussed by MM. Barthélemy, Besnier, Fournier, and Julien.—*La Médecine Contemporaine*, Feb., 1892.

**Pospelow (Alexis) on a Case of Syphilitic Reinfection.**—Author details minutely the history of a patient who contracted syphilis in 1882, followed by all the usual sequelae in a marked degree; at the end of two years the symptoms had entirely disappeared. The patient was kept under observation two years longer, and no evidence of syphilis appearing, consent was given to his marriage. Within a year a healthy child was born at full term. One year after marriage he was obliged to be separated from his wife for three years, and near the end of this time resorted to illicit intercourse. Twenty-eight days later two lesions appeared near base of penis. He was kept under careful observation, and on joining his wife was advised against connection, which patient did not heed. Later all the secondary symptoms developed in a most typical manner, even more pronounced than previous attack.

The wife, being brought for examination, was found to have syphilitic lesions appearing, thus an additional proof of the genuineness of the case.—*Annales de Dermatologie et de Syphiligraphie*, Feb., 1892.

**White (J. B.) on Observations on the Syphilitic Cachexia.**—For treatment he recommends the hypodermic injection of gr.  $\frac{1}{10}$  of the double chloride of gold and iodide of manganese, repeated every other day or twice a week, and should be injected in the dorso-lumbar region, alternating the sides; double the above dose may be given. "The hypo-

dermic administration of these remedies is facilitated by this combination in the fluid form, and I therefore have used glycerine as a solvent. The fluid requires some care in its preparation to avoid a precipitation of some of its ingredients with a corresponding lessening of its therapeutic value." Each drop contains gr.  $\frac{1}{10}$  and is best given in five minims of a 1% solution of carbolic acid.—*Four. Cut. and Gen.-Urin. Dis.*, April, 1892.

**Martin (Edward) on the Prophylaxis of Gonorrhœa.**—The means of preventing gonorrhœa may then be summarized as follows:

1. Wearing a clean, strong protector.
2. Urination on the part of the woman before coitus, and copious irrigation of the vagina with bichloride of mercury solution, 1 to 10,000, followed by a vaginal tampon applied close to the cervix.
3. Forcible urination immediately after coitus, the stream being repeatedly interrupted by pressing the finger against the meatus.

4. The use of strong nitrate of silver injection, on the first appearance of discharge, before inflammatory symptoms are developed, eighteen grains to the ounce, injected forcibly, so that the first inch of the urethra is fully distended, the rest of the urethra being protected from the application.

5. On the part of the woman, gonorrhœa is best prevented by the insertion before coitus of a cotton tampon sufficiently large to occlude the upper part of the vagina and prevent the entrance of any matter into the os uteri, and by immediate urination after coitus with copious lotions and vaginal injections of hot bichloride of mercury solution, 1 to 10,000.

6. Vulvo-vaginitis of children is best guarded against by exercising care in regard to attendants, especially those who have to do with the washing of such children. When a single case develops, it should be separated from healthy children as would one ill from any other contagious disease.

7. As methods of prophylaxis the value of which is not yet determined, may be mentioned the administration of antiseptic substances, such as salol, by the mouth and the injection of the first inch of the urethra with a mild antiseptic solution immediately after coitus.—*Therapeutic Gazette*, Mar. 15, 1892.



**Morrow (P. A.) on Some Differential Points in the Diagnosis of Syphilis and Tuberculosis, with Illustrative Cases.**—The writer details the history of a case of syphilis of the elbow- and ankle-joints, with photographs of syphilis of hip and knee; also two photographs—one tubercular, the other syphilitic dactylitis.

*Differential Points in Cutaneous Lesions.*

1. Syphilitic lesions are general in their distribution; they may occur upon any region of the body. Scrofulous lesions are more limited in their localization; they have a special predilection for the neck or regions rich in lymphatic glands.

2. Syphilitic lesions are ambulatory and changing; they disappear and re-appear elsewhere. Scrofulous lesions are fixed and permanent.

3. The color of syphilitic lesions is of a reddish-brown, or lean ham tint; the color of scrofulous lesions is brighter and more violaceous in hue.

4. Syphilis is distinguished from scrofula in its objective appearances and mode of evolution. In the initial stage the syphilitic neoplasms are firm and hard; the scrofulous infiltrations are softer and more compressible. In the ulcerative stage the differences are more pronounced: the ulcers of syphilis are cleanly cut, regular in contour, with perpendicular firmly infiltrated borders, encircled by a pigmented areola; scrofulous ulcers are irregular, with soft undermined borders, they are painless, bleed easily, and show slight tendency to spread.

5. The crusts of syphilis are bulkier, thicker, with a tendency to accumulate in layers, and darker in color; the cicatrices are smooth and remain long surrounded by a pigmented areola. The crusts of scrofula are softer, more adherent; the cicatrices are elevated, irregular, bridled; they retain their violaceous color for a long time.

6. The course of the syphilitic ulcer though sluggish and chronic is much more rapid than that of scrofula.

7. Absence of pain and local reaction characterize both syphilitic and scrofulous ulcers; they are essentially lesions without symptoms.

*Difference Between Syphilitic and Tubercular Testicle.*

1. The seat of syphilitic sarcocoele is essentially testicular, in a majority of cases the epididymis escapes or is only

incidentally involved in the infiltration; the primary seat of tubercular infiltration is always in the epididymis, the body of the testis being secondarily involved.

2. In syphilitic sarcocoele the ovoid form of the testicle is preserved. Hyperplastic infiltration of the connective tissue may be general or partial, presenting in the form of indurated plaques of cartilaginous hardness which cap the body of the testis like a shell. These vary in area and thickness and may be associated with hard nodular deposits upon the surface or in the body of the testicles which form knobby protuberances. The tuberculous testis is increased in size, hard, irregularly nodular or lumpy.

3. In syphilis there is but slight tendency to degeneration or breaking down of the gummous nodules; in tuberculosis there is a more marked tendency to suppurative changes, the formation of abscesses and fistulous tracts.

4. Syphilitic fungus of the testicle is comparatively rare; it is characterized by the discharge of gummous material and disintegrated tubules, with more or less abundant granulations which bleed easily, no sinuses. Fungus of the tuberculous testis is also rare; the granulations are pale and soft, with numerous sinuses leading into the testicle.

5. In syphilis of the testicle the cord, seminal vesicles, and prostate are not involved. In tuberculosis of the testis these organs are almost invariably implicated. Heiberg's statistics show that in the 13 cases of primary tuberculosis above referred to the seminal vesicles were involved in 8 cases, the prostate in 11; in 23 secondary cases the seminal vesicles were affected in 14 cases, the prostate in 15.

6. Hydrocele is almost constantly associated with syphilis of the testicle; in tuberculosis of the testis in not more than one-third of the cases.

7. In both forms the development is slow and insidious, the diseased organ insensitive, and the entire process is indolent and aphlegmasic.

*Diagnostic Points of Syphilitic and Tubercular Osteitis.*

1. Syphilis exhibits a marked predilection for the long bones; its habitual localization is in the diaphysis and almost always at its terminal extremity. Tuberculosis is almost exclusively seated in the epiphyses, rarely affecting the shaft.

2. In syphilis there is a marked enlargement of the bone by more or less voluminous osseous tumors or hyperostoses, with little or no involvement of the soft parts; in tuberculosis the tumefaction is due less to increase in size of the bone than to oedematous infiltration of the soft structures.

3. In syphilis there is little tendency to suppuration and necrosis; in tuberculosis the pyogenic tendency is marked.

4. In syphilis osteocopic pains, with tendency to nocturnal exacerbation, is a pronounced feature; in tuberculosis the pain is dull and heavy, not aggravated at night, sometimes there is entire absence of acute painful symptoms.

5. The osseous lesions of syphilis rarely react upon the general system, while those of tuberculosis often determine a marked impairment of general health, grave complications, hectic fever, cachexia, etc.—*Four. Cut. and Gen.-Urinary Diseases*, April, 1892.

**Guiteras (Ramon) on the Use of Silver in Urethral Inflammations.**—He reports nine cases of acute urethritis, beginning with an injection of one grain to the ounce and increasing a grain each day, and presents the following conclusions:

1. That nitrate of silver is not as dangerous in acute urethral inflammations as is generally supposed.

2. That by beginning with small doses and increasing daily a tolerance can be established (the same as in chronic cases).

3. That although a solution of the strength of fifteen or twenty grains to the ounce can be reached in this way, that it is not wise to go above eight or ten grains; and then if the result is not favorable, to continue with some other means.

4. That in this, as in bichloride irrigations, and all other methods which try to cure this trouble quickly, a dry, congested and slightly irritated condition is liable to follow, which should be treated for some days by mild astringents, these to be left off gradually.

5. That when the discharge becomes very slight, it is better at times to decrease the strength of the arg. nit. than to increase it.

6. That in cases of gonorrhœal cystitis, which are usually acute, good results are obtained by instillations of this drug.

7. That in cases of chronic deep urethral inflammations, especially those of a granular nature, deep urethral injections are the remedy *par excellence*.

8. That nitrate of silver as an abortive should not be used, as in doing this periurethral inflammations may be set up, which might cause considerable trouble.—*Four. Cut. and Gen.-Urinary Diseases*, April, 1892.

## REPORT ON LARYNGOLOGY AND RHINOLOGY.

BY CHARLES H. KNIGHT, M.D.

**Lane (Arbuthnot) on Severe Hemorrhage Following Removal of the Tonsil.**—The patient was twenty-one years of age and his history and appearance, both general and local, were free from indications of unusual tendency to bleeding. The tonsil is said to have been "very freely" removed. The primary hemorrhage recurred and continued steadily in spite of local applications. Two days afterwards, when the patient appeared to be dying of collapse, the common carotid was tied, after the introduction into the circulation of three or four pints of normal salt solution. The effect of the saline infusion was promptly beneficial, the bleeding was controlled, and the patient left the hospital quite well in a few days. In the discussion of the foregoing case Harrison

Cripps took occasion to condemn the practice of ligation of the common trunk for tonsillar hemorrhage, on account of the danger of cerebral symptoms, and because the vascular supply to the tonsil is derived from the *external* carotid, which latter vessel is therefore the proper one to tie, the ligature being applied between the superior thyroid and the lingual. It was suggested by Hulke that pressure upon the bleeding stump may be effectively applied by means of a long-bladed forceps padded with lint, one limb upon the tonsil and the other making counter pressure externally. Ligation of the external carotid, although perhaps the better operation, takes much longer, and the condition of the patient may be so urgent as to compel choice of the common vessel. In reply Lane stated that

he had seldom found difficulty in controlling hemorrhage from the tonsil by digital pressure. In the present case he had exposed both the external and the common carotid, but was prevented from tying the former on account of the presence of a large ascending pharyngeal artery, and because the branches of the external carotid arose very near its origin. He drew particular attention to the value of preliminary saline injections as a prevention of cerebral trouble.—*The Lancet*, London, April 30, 1892.

(This case resembles one reported by Fuller in the *Am. Four. Med. Sci.*, of April, 1888, in which Sands did saline infusion *after* the common carotid had been tied, the patient being at the time almost moribund. As in nearly all of the reported cases of alarming hemorrhage after tonsillectomy, the patient was an adult. On theoretical grounds, as shown by Delavan, we should not expect to check hemorrhage from the tonsil by closing the common carotid trunk. The force of the blood current *may* be thus diminished to a sufficient degree to permit the vessels to be sealed by a clot after a protracted hemorrhage, but the external carotid is obviously the vessel to be tied if it becomes necessary under any circumstances to resort to such a radical procedure. It has not been determined how much the preliminary infusion contributed to hemostasis in Lane's case; it is very certain that the bleeding continued in Fuller's case after the common carotid had been tied. Experiences of this kind certainly emphasize the importance of caution in removing tonsils in adults, and encourage the claims of those who advocate the invariable use of bloodless methods, except perhaps in children, in spite of the fact that they are slower and more painful. Any improvement in technique is therefore to be welcomed. At a recent meeting of the Section on Laryngology of the N. Y. Academy of Medicine the reporter presented an "electric tonsil snare," of which the following is a brief description. The instrument consists of a double canula carrying the wire, No. 30 platinum, which is attached to a solid steel shaft, from which it is thoroughly insulated. The steel shaft ends in a ring whose vertical diameter is longer, to correspond with that of most tonsils. The ring may be of different sizes.

The loop is shaped to adapt itself to the ring, to which it is fastened by a single fine thread at its distal extremity. The tonsil having been surrounded by the ring, traction is made on the loop, bringing it in contact with the tonsil above and below. At this instant the current is turned on, the thread holding the wire is burned through, the wire buries itself, and the division of the tissues may be completed as rapidly as may be desired. In this way there is no difficulty in putting the wire around the tonsil, and the velum and dorsum of the tongue are perfectly guarded by the steel ring which remains quite cool. The total result of the operation is not measured by the amount of tissue actually removed, since the parts left behind are cauterized to a considerable depth. It is customary to excise both tonsils at one sitting; it is good policy to limit the cautery loop operation to a single tonsil at a time. The second may be removed a week or ten days later. This method is to be recommended only in adults possessed of rather more than average fortitude; it cannot be used in children, except under general anæsthesia, and is not practicable in the case of flat, deep-seated tonsils.)

**Miller (F. E.) on Gottstein's Curette for Removing Adenoids.**—The paper briefly reviews the symptoms characteristic of adenoid vegetations, recounts the various methods used in removing them, and concludes with a description of the curette, the proper way of using it and the advantages it offers, which are said to be (1) quickness, (2) no necessity for ether, (3) thoroughness, provided the instrument be properly introduced. The mode of manipulating the instrument is illustrated by several very graphic plates.—*N. Y. Med. Record*, Feb. 20, 1892.

**Butts (H. H.) on the Use of the Gradle Forceps in Removing Adenoids.**—The chief advantage of this instrument is the fact that it is capable of removing an immense mass of tissue, thus dispensing with frequent introductions. The author strongly advocates moderate anæsthesia, and has never met with a case of serious hemorrhage. In the twenty-nine cases forming the basis of this paper amelioration of symptoms was immediate, and there was no recurrence. Marked improvement was in certain cases somewhat delayed, probably in consequence of the fact that the lymphoid tissue was extensively

distributed, and its removal involved an unusual amount of traumatism and subsequent swelling. — *Med. News*, Phila., April 2, 1892.

**Kelly (A. B. D.) on Suppuration in the Antrum of Highmore.**—The disease is not rare, but the classical signs are often absent and a diagnosis must in the majority of cases be based on a few obscure symptoms. The marked symptoms as generally described are present only when the natural outlet of the antrum is closed, true empyema; when the pus-containing cavity has a free exit the signs are less pronounced or even absent, a condition which the author proposes to designate by the term suppuration in the antrum. Acknowledgment is made of the important researches of Ziem in this field, stimulated in part by an unfortunate personal experience. Suppuration of the antrum may occasionally be traced to nasal catarrh. The most frequent cause is dental disease. The symptoms enumerated are unilateral purulent discharge from the nose (when both antra are diseased, or the discharge is so free as to find its way around the posterior margin of the septum, the escape of pus is bilateral); the flow is intermittent or is favored by certain positions of the head which bring the opening of the antrum dependent. The pus is odorless or may be fetid. In the latter case it is offensive to the patient himself, which is not true of "ozæna," in which the patient, having lost the sense of smell, is unconscious of the fetor. Headache or a feeling of pressure especially in the supra-orbital region, suggestive of trouble in the frontal sinus, is a frequent symptom. On inspection of the nasal cavity pus is usually found. The parts having been cleansed, the patient is directed to hold his head low and in the course of a few moments pus will again be found in the region of the middle meatus. Transillumination, described by Heryng in 1889, is referred to as a valuable means of diagnosis, subject to error in certain cases in consequence of asymmetry of the antra, one being large with thin walls, while the other may be small and thick-walled. Moreover, this test may be prevented by accumulation of pus, or by a solid growth in the cavity, or by a thickening of its lining membrane.

Distension of the antrum may be caused by pus or growths in the cavity. When due to pus it does not usually reach a great

size owing to a fistula forming at a comparatively early stage. On the other hand, when caused by a growth, the distension may become very considerable. Further points of distinction are to be found in the mode of onset and course of the two conditions. In transillumination the surgeon has a convenient means of distinguishing a cyst from a solid growth. In the case of a cyst with serous contents, the thin walls and fluid promote the transmission of the light, whereas a solid growth completely prevents it. To form a diagnosis, and to indicate the treatment necessary, this method is therefore invaluable; for, while cysts in the antrum require merely to be tapped, solid tumors, being usually of a sarcomatous or carcinomatous nature, demand, when suitable for operation, resection of the superior maxilla.

Aspiration with a Pravaz's syringe, introduced by Schmidt in 1888, and exploratory washing of the cavity, as advocated by Lichtwitz, are referred to as useful confirmatory tests. Resistance on the part of the patient, malformation or thickening of the wall of the nostril, inspissation of the secretion or its scantiness are mentioned as possible obstacles to the practice of aspiration. The author refers briefly to the various methods of treatment and expresses a preference for operation by the mouth. He presents the following advantages claimed for intranasal operations: (1) particles of food cannot gain access to the antrum; (2) pus does not flow into the mouth and injure the digestion; (3) extraction of a tooth is unnecessary. On the other hand, the disadvantages are: (1) drainage cannot be so thorough, because the opening is not at the lowest part of the cavity; (2) it is uncomfortable, difficult, and in some cases impossible for the patient himself to carry out the after treatment.

Krause's method, suggested in 1889, consists in thoroughly washing out the antrum, drying it by blowing air through, and afterwards filling it with iodol. Curetting the antrum, for which procedure a large opening is necessary, may be required when we have reason to believe that the mucous lining has been transformed into a pyogenic membrane. — *Glasgow Med. Jour.*, Feb., 1892.

**Lichtwitz on the Frequency of Bilateral Empyema of the Antrum of Highmore, and the Necessity of**

**Methodical Exploratory Irrigation of this Cavity in Cases of Nasal Blennorrhœa.**—But few cases of bilateral disease are to be found in literature. Ziem, in 1866, reported 8 cases out of 25 of nasal blennorrhœa. Kaufmann reported 13 in 36 cases of empyema. Gradenigo, who examined the sinuses of 300 cadavers, found 19 cases of empyema of the antrum, of which 6 were bilateral. In 1890 Lichtwitz related 4 cases of double empyema amongst 14, and he has since seen 8 more cases; in other words, 12 bilateral cases in 40 of abscess of the antrum. The rarity of recorded cases may be explained by the obscurity of symptoms and defective methods of examination. Lichtwitz is an advocate of exploratory irrigation for the purpose of confirming the diagnosis, which is nearly always somewhat uncertain, in order to avoid a large useless opening in the antrum, and also to demonstrate to the patient the necessity of intervention. He reaches the sinus by puncturing the outer wall of the inferior meatus by means of a thin, straight trocar. Experience with 111 punctures has convinced him of the value of this mode of investigation. In 43 the suspicion of disease was confirmed, and in

12 of these double empyema was found. In 4 cases the nasal wall could not be pierced, and in 2 the operation was suspended. Puncture is but slightly painful, and may be done without local anæsthesia. Hemorrhage amounts to nothing. The procedure is entirely devoid of danger, so far as the introduction of microbes from the nasal fossa is concerned, since the lining membrane of the antrum is directly continuous with that of the nose through the normal opening of the sinus. The opinion announced by Luc some months ago that the empyema of dental origin is characterized by fetid pus containing various micro-organisms, while that of other origin develops non-fetid pus containing only streptococci, is hardly to be accepted so far as fetor is concerned, that feature depending rather upon the duration of retention of the pus. The prognosis of double empyema is bad; only 2 of 12 patients were cured, and in every case the treatment must be very prolonged. Cooper's operation, which permits the patient to take care of himself, followed by the use of pencils of iodoform, tannin, etc., has given the best results.—*The Four. of Laryngol. and Rhinol.*, April, 1892.

## REPORT ON DERMATOLOGY.

BY CONDUCT W. CUTLER, M.D.

**White (H. C.) on Local Infection of Tuberculosis.**—In lupus, verruca necrogenica, tuberculosis cutis, and scrofuloderma, as in other forms less commonly well known, we find the same bacillus, the same as in tuberculous disease of other organs, capable of cultivation and of producing one and the same disease in animals on inoculation, from whichever of these clinical forms it is taken. Conclusive evidence has been collected, moreover, that one form may produce the same or another when inoculated or transferred from one tissue to another tissue of the same person, or to the tissues of a second person. The common nature and the common danger of all forms of tuberculosis having been established, the question which especially concerns us now is in what way and in what form is the disease most likely to be communicated to the physician or surgeon.

The verruca necrogenica, or anatomical

tubercle, has long been known as affecting the fingers of dissectors and autopsy makers, but it is only within a few years that its tuberculous nature has been known. Lately a much more extensive verrucous affection of the integument has become recognized also as a true cutaneous tuberculosis, and entitled tuberculosis verrucosa. Both forms contain the tubercle bacillus, and are, in fact, anatomically identical in all respects. The first-named clinical form is undoubtedly acquired in the dissecting and necropsy rooms by contact with tuberculous tissues of the cadaver. The latter, much more extensive and sometimes multiple, is often acquired, I believe, by contact with phthisical sputa and open scrofulous glands. I have seen it repeatedly upon the hands of consumptives, and those in attendance upon them and patients with scrofulous ulcers. One may therefore acquire cutaneous forms of tuberculosis by making dissections and autops-

sies, by examinations of all external forms of the disease, by surgical operations upon "scrofulous" gland, bone and joint disease, and by contact with phthisical sputa. That cases of inoculation among physicians, considering the great prevalence of these many forms of the disease, are not more common, may be attributed to the protective nature of a sound epidermis. That none of us may surely escape such danger will be apparent to you, when I state that two members of this body have thus acquired tuberculosis verrucosa, and I have treated several students with verruca necrogenica. It is indeed fortunate that such forms of the disease tend to remain strictly localized cutaneous processes for indefinite periods, and not to become foci for dissemination of the bacillus to internal vital organs, as do the softening varieties, lupus and scrofuloderma, in so large a percentage of cases.—*Boston Med. and Surg. Journal*, Feb. 4, 1892.

**Simon (R. M.) on Pilocarpin in Dermatology.**—In November, 1890, Dr. Klotz read a short paper on "Pilocarpin in Dermatology," and though his personal experience was limited, spoke in the highest terms of its value: but it is a matter for wonderment that the American Dermatological Association, before whom the paper was read, seemed to be unable to discuss it from lack of experience of the use of the drug.

There is abundant *a priori* reason for expecting benefit from its use in cases of great thickening of the skin, such as chronic eczema or scleroderma. I have tried pilocarpin in a few cases with the happiest results. It has been objected that it is a drug requiring heroism to administer and great care in its administration. If, as is indeed the case, this be so, it can be replied that we want to use pilocarpin only in cases in which other remedies are useless, and our patients often in very great distress.

S. P. came under my charge after having spent much time and money at Harrogate and elsewhere in trying to get relief. For fifteen months he had had eczema, and suffered acutely from the itching and distress dependent upon it. Nothing had given him much relief. He was ordered bran baths, and a lotion containing half an ounce of liquor carbonis detergens to a pint of lime water, while liquor arsenicalis, with small doses of iodide of potassium,

was given internally. When I saw him his skin was enormously thickened and pigmented by the protracted inflammation, and I held out to him no hope of improvement until this thickening had been absorbed. To effect this, ointments containing salicylic acid were tried, but without much result, so on March 5, 1891, he was admitted into the General Hospital to try subcutaneous injections of pilocarpin. The dose employed was at first one eighth of a grain, twice daily. There was very little sweating at first, but a good deal subsequently; otherwise, beyond relief to the itching, no obvious results were noted; but gradually the skin got thinner and the irritation less. He had to leave the hospital on April 2d, for business reasons, but was readmitted on June 9th. The same treatment was adopted, and on July 8th he was again discharged as he felt so very much better. Two months ago I received a very grateful letter from him, saying that he was quite well and that his skin was normal. He had altogether 110 injections, but never suffered local or general discomfort therefrom.

Though the course of treatment may seem to have been very prolonged, and to be one requiring great patience, both on the part of the patient and the doctor, it must be remembered that we know no other remedy which could be expected to produce anything like so good, if indeed any, result.

Pachydermatous conditions are always serious, and though local thickenings may be fairly easily dealt with, a general diffuse chronic inflammation of the skin has hitherto been almost beyond the power of medicine to cure. The difficulties of applying keratolytic agents over a large surface are almost insuperable, and the advantage is not commensurate.

For the relief of prurigo senilis I have found nothing so useful as the hypodermic injection of pilocarpin, and, though the relief is only temporary, to a patient worn almost to death by itching and sleeplessness a few days' respite is a glimpse of heaven. In psoriasis I have met with no good results from the use of pilocarpin, and in subacute eczema with bad ones.—*British Med. Journal*, Feb. 6, 1892.

**Bulkley (L. D.) on Leprosy.**—Dr. Bulkley in a very interesting and complete article on leprosy sums up the result of his studies as follows:

1. There is no warrant for the popular terror surrounding the name of "leprosy" as a disease.

2. The disease is not contagious in the ordinary acceptance of the term as applied to such diseases as small-pox, scarlatina, or syphilis.

3. Leprosy is probably due to the presence of a bacillus.

4. There is strong reason to suspect that it may first be introduced into the system by the way of food, and fish is the most likely of all substances to furnish and convey the poison.

5. There is evidence that when acquired the disease may, under favorable conditions, be transferred from one person to another.

6. Heredity probably accounts for a share of the cases, but the disease is not necessarily transmitted by inheritance.

7. Inoculations with leprosy matter may be the means of conveying the disease when all the conditions are favorable.

8. There are far more and greater reasons for the restriction of syphilis and tuberculosis by isolation and segregation than for the necessity of these regulations in regard to leprosy.—*Internat. Med. Mag.*, March, 1892.

**Reed (C. L.) on the Result of Tuberculin in Tubercular Skin Diseases.**—Could the opinion of most users of the remedy be summarized, the following might be a fair, unprejudiced rendition of the verdict:

1. That tubercular lesions react to injections of Koch's remedy in an almost magical manner.

2. That such reactions proclaim the diagnostic value of the remedy.

3. That it is especially in external tuberculosis, *i. e.*, lupus, tuberculosis of mucous membranes, etc., that most beneficial results have followed its administration, results achieved by no other remedy.

4. That smaller doses, with less general reaction and depression, are in most cases indicated.

5. That the remedy is contra-indicated in the extremes of life, in extreme debility, and organic diseases of the heart, kidneys, etc.

6. That the elimination of certain non-essential ingredients of tuberculin, as Klebs is now demonstrating, may guard against disastrous results.

7. That when the healing has come to a

standstill under its administration, the sharp spoon and cautery are adjuvants to its further efficacy by helping to cast off necrotic tissue and by bringing the disease to the surface.

8. That the healing following its administration cannot be regarded less permanent than that following other measures or remedies.—*Cincinnati Lancet-Clinic*, April, 1892.

**Walker (N.) on the Cause of Iododerma.**—The process would seem to be this: owing in some way to stimulation by the iodine the epithelial cells lining the gland do not undergo their normal fatty degeneration and transformation into sebaceous cells; but, reverting under the stimulus to their primitive type, they proliferate once more as true epithelial cells. The sebaceous cells already existing merely fulfil their normal destiny, and as they break down and are thrown off into the follicle, their place being no longer filled by the development of new sebaceous cells, the number gets less and less, until we have the appearance of two or three sebaceous cells surrounded by a large mass of proliferating epithelium. The cells at the margin can be observed in a condition of active mitosis. The new formation is, however, not entirely confined to this seat. As to the relation of the sweat ducts, I was unable to make any direct observation. The epithelium was never distinctly observed descending from the upper layer, but that lining the hair-follicles, apparently also affected by the stimulus, proliferates rapidly, and sends out from the sides of the follicle buds of epithelium. To these buds is due the irregular growth in the upper part of the tumor, while the large masses lower down are occupying the position of the sebaceous glands. A degenerative process is, however, also present. In the hair-follicles, occasionally in the sebaceous remains, and often also in the centre of epithelial masses, leucocytes have found their way and led to the formation of small abscesses, the existence of which has been frequently noted clinically.—*The Lancet*, March 12, 1892.

**Duhring (L. A.) on Treatment of a Case of Acne Rosacea and Sycosis.**—Treatment of *acne rosacea* in ordinary cases, is much the same as in acne. The following ointment

R.—Ung. sulphur . . . . ʒj.  
Resorcin . . . . ʒss.  
Acid. salicylici . . . . gr. xx.—M.

has been applied with good result at night, and the following lotion to be used in the morning :

℞.—Sulphur. precip. . . . . 3 j.  
Etheris . . . . . f 3 vj.  
Aq. Cogn. . . . . f 3 iv.  
Alcoholis . . . . . q. s. ad f 3 iv.—M.

S.—To be shaken and applied for fifteen minutes each morning.

This treatment will be continued for several days. The lotion is a valuable formula, in some cases proving of more benefit than any other remedy. The method of combining remedies, by using dissimilar ones night and morning, is frequently found to be of distinct advantage.

*Sycosis* is a disease of the subacute type, which calls for stimulating remedies, such as the following :

℞.—Zinci sulphatis } aa . . . grs. x.  
Potass. sulphidi }  
Aquæ . . . . . f 3 iv.—M.

S.—Apply to face three or four times a day, for a few days.

After which use sulphur ointment (3 ij. to the ounce), rubbed in with friction. The face should be shaved every other day. Ichthyol and resorcin, in form of lotion or ointment, may be used locally with advantage. Constitutional treatment, as a rule, is of little value. Some cases require stronger and more penetrating remedies, as salicylic acid with sulphur ointment. Never aggravate the disease by remedies, and as soon as an increased inflammation sets in, stop the remedy. If the treatment being used does not show improvement in three or four days, it is advisable to make a change.—*Phila. Med. News*, March 5, 1892.

**Leveiseur (F. J.) on Treatment Following the Removal of Hair by Electrolysis.**—Immediately after the operation of removing the hair by electrolysis the patient's face is washed with hot water, to which some alcohol may be added. The redness and wheals which the operation is likely to produce generally subside in a few hours, but is followed by an inflammatory process in and around the hair follicles. This inflammation lasts a day or two, in some cases even longer. In one of my cases small superficial abscesses appeared the third day after the operation. In order to avoid all such unpleasant complications I prescribe the following salve :

℞.—Lanolini,  
Ungt. aquæ rosæ.....aa 3 ss.  
Hydrarg. bichlor. corros..... gr. j.

This is to be applied at night and washed off in the morning, and has proved to be an excellent antiseptic measure.—*Med. Record*, Feb. 20, 1892.

**Waugh (W. F.) on Pruritus.**—Pruritus may depend on any of the following causes :

1. *Local irritation* from rough clothing, parasites, unhealthy discharges (saccharine urine, leucorrhœa).

2. Inflammations of the skin ; eczema, lichen, early psoriasis, pemphigus ; slightly in roseola ; sometimes severe after the local use of croton oil or tartar emetic. Desquamating syphilides may itch, but cutaneous affections of the lower layers of the cutis, as a rule, do not itch ; and these comprehend most specific eruptions and leprosy.

3. *Reflex irritation* from the uterus or stomach in urticaria, pregnancy, intestinal worms, or from the kidneys.

4. The presence of certain *substances in the blood*, such as biliary acids and copaiba.

5. *Undiscovered causes*, as in true prurigo and strophulus. Kaposi speaks of pruritus cutaneus universalis as a true idiopathic neurosis.

Duhring has described *pruritus hiemalis* due to the effect of cold, and most apt to be felt by pruriginous persons who put on loosely knit underclothing.

Many persons are attacked with pruritus on putting woollens next to the skin ; especially Scotch wool.

The uric acid diathesis, gout, and plethora are sometimes causes of pruritus. Certain articles of diet, such as shell-fish, lobsters, beer, coffee, mushrooms, and tomatoes, are thought to cause pruritus in some persons.

Albuminuria may be accompanied by itching due to irritation of the peripheral nerves or of the sensory centres by toxic substances in the blood. Depression of the spirits and various emotional disturbances may give rise to pruritus. Opium causes pruritus, and Hardaway says that the same symptom is due to the inordinate use of tea, and to oatmeal. A rural tradition ascribes a form of itching to the use of buckwheat. The "Prairie itch," or "Texas," or "Kansas" scratches, is in some cases a form of eczema, in others scabies.



Nasal pruritus is thought to indicate the presence of worms in the intestinal canal in children, or it may precede an asthmatic paroxysm in adults. Pruritus ani in children is due to ascarides, or to phimosi; in adults it accompanies the disorders incident to a sedentary life, hemorrhoids, fissure, fistula, constipation, enlarged prostate, etc.

Pruritus pudendi may be due to diabetes, vesical calculus, leucorrhœa, varix of the labia; or it may be due to the irritation by the menstrual fluid, and is then only present during its flow. Pruritus of the legs, if not pruritus hiemalis, is generally due to plethora or uræmia. Limited to the feet, pruritus is caused by the accumulation of epithelium, not removed by ordinary ablution. Pruritus senilis, not due to pediculi or to diabetes, is probably caused by atrophy of the papillæ of the skin.

The internal treatment of pruritus should be guarded very largely by the condition of the patient and by the cause of the itching.

The external treatment must necessarily depend very much upon the local conditions present in each individual case, but some of the following formulæ will be found very useful:

℞.—Camphoræ,  
Chloralis hydrat. .... 3 j-ij.

Rub together until liquefied; then add slowly, with friction:

Ung. aquæ rosæ ..... 3 j.  
M.—S. Ointment.

—*Bulkeley.*

℞.—Hydrargyri chlorid. corros. .... gr. j.  
Pulv. aluminis. .... gr. xx.  
Amyli ..... 3 jss.  
Aquæ ..... 3 vj.

M.—S. Apply locally.

—*Goodell.*

℞.—Acidi carbolic. .... 3 j.  
Potassæ fusæ ..... 3 ss.  
Aquæ ..... 3 x.

M.—S. Lotion.

—*J. C. Wilson.*

℞.—Naphthol. .... gr. ccxxv.  
Saponis viridis. .... 3 xijss.  
Cretæ preparat. .... 3 ijss.  
Adipis. .... 3 cxxv.

M.—S. Apply to parts, and then powder with starch.

℞.—Sodii bichloratis. .... 3 ss.  
Morphinæ sulphatis. .... gr. vj.  
Aquæ rosæ ..... 3 viij.  
M.—S. Lotion; apply twice daily.

—*Meigs.*

℞.—Ol. staphisagriæ ..... 3 j.  
Adipis. .... 3 j.

M.—S. Apply once or twice daily.

—*Balmanno Squire.*

℞.—Aquæ laureocerasi. .... 3 j.  
Acidi nitrici dilut. .... 3 ss.  
Acidi hydrocyanici dilut. .... 3 iv.  
Glycerini. .... 3 j.  
Lactis amygdalæ. .... 3 xij.

M.—Ft. lotio. For pruritus vulvæ.

—*Greenhalgh.*

℞.—Acidi hydrocyanici dilut. .... 3 ss-j.  
Infusi althææ. .... 3 v-viij.

M.—S. Lotion.

—*Fox.*

℞.—Potassii cyanidi. .... gr. xv.  
Aquæ laureocerasi. .... 3 viij.

M.—S. Lotion.

—*Anderson.*

℞.—Liquor carbonis detergentis. .... 3 ss.  
Glycerini. .... 3 j.  
Aquæ ..... ad 3 x.

M.—S. Lotion.

—*Sparks.*

℞.—Acidi benzoici. .... gr. cx.  
Ol. caryophylli. .... gtt. xl.  
Alcohol. .... 3 ijss.

Solve, et adde:

Cerati simp. .... 3 viij.  
Bals. Peruvianæ. .... 3 j.

M.—Ft. unguent. Especially good for scabies.

—*Potter.*

℞.—Acidi hydrocyanici dilut. .... 3 ij.  
Sodii boratis. .... 3 j.  
Aquæ rosæ ..... 3 viij.

M.—S. Lotion.

—*Fox.*

℞.—Potassii cyanidi. .... gr. vj.  
Pulv. cocci. .... gr. j.  
Ung. aquæ rosæ ..... 3 j.

M.—S. Ointment.

—*Anderson.*

℞.—Cretæ preparat. .... 3 j.  
Coal tar. .... 3 j-ij.  
Ol. lini. .... 3 ijss.

M.—Ft. unguent.

—*Potter.*

℞.—Zinci oxidi. .... 3 jss.  
Potassæ bromidi. .... 3 ijss.  
Ext. cannabis indicæ. .... 3 ss.  
Glyceriti amyli. .... 3 viijss.

M.—S. Wash vulva with very hot flax-seed tea, and apply above.

—*Ménière.*

℞.—Acidi carbolic. .... 3 iv.  
Glycerini. .... 3 j.  
Aquæ ..... q. s. ad Oj.  
Ol. menthæ pip. .... 3 jss.

M.—S. Use as a spray, with atomizer.

—*Hardaway.*

℞.—Thymolis. .... 3 ij.  
Liq. potassæ. .... 3 j.  
Glycerini. .... 3 ij.  
Aquæ ..... 3 viij.

M.—S. Lotion.

—*Crocker.*

—*The Times and Register, April, 1892.*

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

**Effect of Deep Inspiration on the Assimilation of Fat.**—Acting on Professor Chudnovski's advice, Dr. A. Pavper-toff has made a series of observations on the effect of deep or forced inspiration and expiration on the assimilation of the fatty matters contained in food. The observations were made on nine healthy young persons, some of them being carried out in winter, others in summer. The sittings were held once a day in a large and well-ventilated room, each subject making from 120 to 200 forced inspirations and expirations. By analyses of the fæces during the three periods—before, during, and after the forced inspirations—it was found that the amount of fatty acids in the fæces in all cases diminished during the second period, the average diminution being 1.246 per cent. In the third period the quantity of fatty acids, as compared with that excreted in the first, diminished slightly in some cases and increased slightly in others. All that can be stated therefore as the result of the experiments is that a slight increase in the assimilation of fat takes place while forced or deep respiration is going on. The above research is published as a "preliminary note" in the *Vratch*, No. 6, 1892.—Ed., *London Lancet*, March 10th.

**"Chemotaxis" vel "Chemiotaxis."**—As science advances and new ideas spring from new observations, fresh terms have necessarily to be employed to denote phenomena that have previously passed unnoticed. But investigators who employ such terms should be careful to see that they are well understood by those who listen to expositions or peruse writings which contain them. It is in the interest of the many who desire to have a clear comprehension of the knotty question at present dividing the pathological world that we would invite the next "phagocytist"—another new term (!) necessitated by the struggle that is now in progress—who speaks in the debate at the Pathological Society to condescend to state explicitly the precise etymology of the phrase that lies at the root of the controversy, and concerning the spelling and pronunciation of which there seems to be as great a difference of opinion as there is between the two opposing camps on the main question. Of course, it may be said that it does not

matter an "iota" if that useful little vowel be omitted, and the word of five syllables degraded to one of four; but there must be some reason for its retention in the minds of those who do retain it, or for its rejection in the minds of those who discard it. Nor is this all. The ordinary man would like to go a step farther, and ask the expert how the two parts of this compound word hang together. By a stretch of imagination he can conceive that "taxis" may imply the marshalling of the phagocyte forces to resist the invader; but then the chemical influences which he may suppose to be denoted by the first root are considered to act either "positively" in attracting or "negatively" in repelling the martial leucocyte. So that "taxis" cannot be used in its classical sense. It is, perhaps, unfortunate that the discovery that some substances attract and others repel leucocytes (the term "chemotaxis" was in the first instance, we believe, applied to micro-organisms) should have led to the use of the adjectives "positive" and "negative." But we suppose there is no help for it now. Only it would be satisfactory to know how this important word is to be spelt, especially if it is going to assume a permanent place in pathological terminology. We should like to add also a protest against the lax way in which such words as "immune," "vaccination," and the like are being used by pathologists. For it would seem that the precision with which they conduct their scientific researches is somewhat lacking in their language. Can it be because science is replacing the old-fashioned classical education in primary schools that so little regard is often paid to etymology by scientific men?—Ed., *London Lancet*, March 12th.

**Lewis (L.) on Ocular Appearances.**

—Of all the external signs of internal disease or disorders that arrest the physician's attention, the condition of the eyes is probably the first to attract his notice. The state of the pulse, tongue, and temperature, and the general appearance of the patient, are finger-posts that indicate special examination to further elucidate the case; but the eye and its pupil are also unerring guides to the observant practitioner, and start him at once on the road to a correct diagnosis, both by the signifi-

cance of their appearance, and by enabling him to exclude many diseases in which they play no part.

The eyes are congested in scarlet-fever, variola, rubeola, yellow-fever, typhus fever, and meningitis. They are projecting in asphyxia, hydrocephalus, hydrophobia, exophthalmic goitre, and sometimes in functional heart disease; and sunken in collapse, cholera, and hectic. They are staring in convulsions, apoplexy, catalepsy, meningitis, and dementia. They are rolling in epilepsy and tuberculous meningitis; and they are photophobic in hysteria, meningitis, and cephalalgia.

The pupils are dilated in syncope, hysteria, collapse, asphyxia, epilepsy, drowning, uræmia, coma; generally in phthisis; and in poisoning by belladonna, atrophia, fungi, and many vegetable irritants and narcotics. They are contracted in concussion, sunstroke, typhus fever, hemorrhage of the pons; and in poisoning by opium, morphine, prussic acid, calabar bean, ergot of rye, and pilocarpine. They are contracted at first and afterwards dilated in compression of the brain, and in poisoning by alcohol, ether, and chloroform; and they are dilated at first and afterwards contracted in severe apoplexy. They are unequal in paralysis, compression of the brain, and posterior spinal sclerosis. And they are frequently oscillating in epilepsy, typhus, and spinal sclerosis.

In diseases of the eyes the external signs also facilitate the diagnosis. They are congested in conjunctivitis, trachoma, and ophthalmia; dilated in mydriasis, glaucoma, and amaurosis; contracted in myosis, retinitis, and iritis; photophobic in strumous ophthalmia, amaurosis, iritis, scleritis, choroiditis, and retinitis; and often oscillating in amaurosis.—*Times and Register*, March 19, 1892.

**Donaldson (E.) on the Relation between Mild and Severe Forms of Some Diseases.**—Mr. Hutchinson has pointed out that rare diseases are sometimes exaggerated forms of what is common. There is a principle which governs the relation between mild and severe forms of some diseases, and which appears not to be recognized in medical writings. The principle is that some well-marked varieties of diseases can only occur in communities where less marked varieties are not uncommon. If we find in a community rare cases of astigmatism of six dioptries, we

are sure to find a large number with less astigmatism. If we find more cases of severe myxœdema in women than men, we may conclude that milder forms of this disease are oftener found in women than men. The functional activity of the thyroid is greater in women. Complexity of function without corresponding complexity of structure practically lowers the level of evolution; and Dr. Hughlings Jackson has taught us that disease frequently attacks the least organized parts. Hence the fact that women have myxœdema more than men comes under the law of dissolution—the reverse of evolution.

To what diseases does the principle that the worst cases occur amongst those who suffer most frequently apply? It applies to diseases in which inherited predisposition plays an important part, *e. g.*, myxœdema, exophthalmic goitre, Raynaud's disease, etc. It holds good also where there is no marked inherited predisposition, as in myopia. In other cases there is no relationship between frequency and severity. A disease may be equally liable to occur in the two sexes or at any age, but owing to greater exposure to exciting causes, one sex or persons of a certain age may suffer oftenest. Infants have purulent ophthalmia less severely than adults, and oftener. If this principle is not recognized error is likely to follow. A physician of great experience writes as follows: "If I may judge from my own experience, these rudimentary cases of Graves' disease are more common in men than in women. Men, as every one knows, are much less frequently affected with exophthalmic goitre than women, and it would appear (at all events as far as I can judge from my own experience) that when men do become affected with Graves' disease the clinical picture is apt to become imperfect." If the principle I have mentioned applies to exophthalmic goitre, it will be found that women suffer oftener than men from the mild as well as the severe forms. Von Graefe was probably in error when he said that exophthalmic goitre was more likely to be fatal in men. A distinguished ophthalmic surgeon writes that bad myopia is found oftenest amongst hospital patients, while the benign form is found oftenest amongst private patients. Mr. Priestley Smith has met this by statistics, and arrived at a different conclusion—one that is quite in harmony with the principle I am discuss-

ing. The question as to the relation that exists between mild and severe myopia is rendered difficult by the fact that some cases of severe myopia differ etiologically from the milder cases. These cases are not, however, sufficiently numerous to vitiate the conclusion that the severest cases occur amongst those who suffer oftenest.

Some difference of opinion exists as to whether mild cases of myopia and albuminuria are to be looked upon as physiological or pathological. It would be well to look on this question in the light of the principle that in communities where the mild forms often occur the severer forms are likely to occasionally crop up. It was thought that albuminuria occurring in association with acute infective diseases was sometimes due to high temperature. It is probable that many of these cases are really mild forms of parenchymatous nephritis due to different poisons acting on the kidneys.—*London Lancet*, Feb. 27, 1892.

**Dabney (W. C.) on the Appearance of Nervous Symptoms in the Early Stages of Diphtheria.**—It is well known that neuritis, or symptoms pointing to neuritic trouble, occur *late* in the course of diphtheria, or as *sequelæ* of the disease. Two cases have recently come under my observation, however, in which very marked numbness and tingling of the limbs, especially of the arms, occurred at the *commencement* of an attack of diphtheria.

W. M. B., aged ten years, was taken with a sore throat on October 12, 1891; the false membrane was at first confined to the tonsils and uvula, but the nose subsequently became involved. There was considerable swelling at the angles of the jaw.

On the second day of the attack the boy complained of tingling and numbness in the limbs, especially in the arms, but there was no apparent diminution of tactile sense or of the sense of pain, nor was there any motor paresis. The tingling and numbness, however, were sufficiently great to occasion much discomfort. He was given  $\frac{1}{8}$  gr. of bichloride of mercury and 15 drops of muriated tincture of iron, in a teaspoonful of glycerine, every two hours, his throat and nose being thoroughly sprayed, just before each dose of the bichloride mixture, with peroxide of hydrogen and water, one part to six. In addition to this, every two hours he took a

tablespoonful of brandy in half a glass of milk. The case ran a favorable course, and ended in recovery. The numbness and tingling lasted three or four days, and disappeared gradually. Two weeks after apparent recovery there was marked paresis of accommodation, but no other paralytic symptoms developed.

The second case occurred in the same family, and was almost precisely similar in character. B. B., aged eight years, was taken sick on November 13th, with severe headache, fever, and sore-throat. There was at this time a small spot of membrane on one tonsil only. With the exception of sore-throat, the only complaint made by this little girl was of numbness and tingling in the limbs; she said they were "all the time asleep." This numbness appeared on the *first* day of the attack, and lasted three or four days, passing off gradually. The false membrane extended to the uvula, and later to the nasal cavity, and there was considerable swelling of the neck. The same treatment was used as in the first case, and the attack ended in recovery. Up to the present time (December 12th) there have been no paralytic symptoms.

The occurrence of numbness and tingling at such an early period of the disease I have not seen before, nor can I find any cases of the kind recorded. It caused me much anxiety, which, as it turned out, was needless, as both cases pursued a mild course, and ended in recovery; but my fear was that such marked nervous symptoms occurring thus early might indicate a degree of nervous disturbance that would lead to serious consequences.—*Phil. Med. News*, Jan. 16, 1892.

**Lambert (S. W.) Filaria Sanguinis Hominis.**—At a recent meeting of the N. Y. Pathological Society, Dr. Lambert presented specimens of the above.

The patient was a young man of negro descent, nineteen years of age, and a native of Santa Cruz. In July, 1890, the first symptom was noticed, *i. e.*, a turbidity of the urine, most marked early each morning. The following month he came to New York, and while on the ship all the symptoms disappeared without treatment. He has been here ever since, and has been perfectly well up to November 30th, of this year, when the same symptoms returned. The first urine passed in the morning looks like milk, but that passed

at other times is only slightly turbid. He complains of some dyspnoea on exertion, and of gastric distress; his appetite is good, tongue clean and bowels regular. There are elastic swellings in each inguinal region, which appear to be of lymphatic origin. An examination of the urine showed it to have a specific gravity of 1.026 an acid reaction, and to contain albumen, fat, pus-cells, and a few red blood-corpuscles. No filaria have been found in the urine, and only twice in the blood—at 11 P. M. on December 2d and 8th.

The filaria sanguinis hominis is the embryo of a nematoid worm, first described in 1873. The parent is three and a half inches long, and lives in the human lymphatic system. There are numerous larvæ, which are born alive. The young filaria live in the blood, and appear in the general circulation only at night, although one observer states that if the patient eat during the night the worms appear during the daytime. They may give rise to hæmaturia, chyluria, or both. But little is known of their development after leaving the body. They have considerable vitality, as shown by the fact that those recently taken from this patient, and placed on a slide with only a little paraffine around the cover-glass, have, without further precautions, remained quite active for five days. Eight varieties of filaria have been described.

Lambert showed the urine which had just been passed by the patient, and remarked that it was more milky than any that he had seen at this time in the evening. He also prepared and exhibited a number of specimens of the blood, and showed the living filaria under the microscope.—*N. Y. Med. Record*, April 30, 1892.

#### Slaughter (R. M.) on Two New Cases of Filaria Sanguinis Hominis.

—The most common manifestation of the presence of filaria in the human subject, in indigenous cases, especially, is chyluria. In many cases it is the only symptom; in some it is associated with others, such, for example, as hæmaturia, lymphangitis, enlarged glands, abscesses, dysentery, diarrhoea, or lumbar pains, etc. In some cases chyluria has not been observed, the leading manifestation being hæmaturia, chylocele, or scrotal elephantiasis, or lymph-scrotum.

In those countries in which the disease is quite common, a formidable array of

pathological conditions has been found associated with filaria.

In neither of the following was it possible to examine the blood. Both occurred in Northern Virginia, neither of the patients ever having lived in a warmer climate. Case I. was an unmarried woman aged sixty-five. When first seen she was anæmic had diarrhoea and slight chills and fever at night. A sample of urine furnished was bloody and chylous. The case was one of chylo-hæmaturia, which a microscopic examination showed to be of filarial origin, many embryo filaria being found in the sediment. There was no evidence of renal disease.

For the next few weeks the patient displayed a tendency to the formation of furuncles about the face; a small alveolar abscess formed above the upper incisors, which I opened; on examining the pus I found several embryo filaria therein. It may be worthy of mention that some twenty or more years ago she suddenly became quite deaf and remained so for several months, when an abscess formed in the mouth. When this was opened the deafness disappeared. Careful inquiry into her past history has elicited no other facts having any bearing on the case. Under treatment, consisting of tonics and astringents, the diarrhoea ceased and her general condition greatly improved.

Case II. Married woman aged forty-five. Has been treated for hysterical paralysis. She conceived an idea that she had Bright's disease, and a specimen of her urine was handed me for microscopic examination. This specimen I found to be chylous and to contain numerous embryo filaria. I have since examined a second specimen, which was also chylous and contained filaria. In this case the chyluria is the only manifestation of the presence of filaria that has been observed, unless the hysterical condition be so regarded, and for this there would seem to be no sufficient reason.—*Phil. Med. News*, Dec. 5, 1891.

Blake (E.) on the Relation of Rheumatism to the Neuroses. — 1. It seems probable that those agencies which are prone to produce neuroses are also capable of causing arthropathies. Such agents as lead, sepsin, alcohol, arsenic, quinine, carbon disulphide, marsh miasm, traumatism, mental shock, senility, and starvation, which can induce rheumatism

or gout, may, instead of arthritis, induce a neural or a cerebral change.

2. There are substantial grounds for suspecting the existence of an inhibitory centre for the uterus above the spinal cord. There are reasons for locating this centre near the vagal nucleus.

(a) The influence of this centre may be impaired by some of the agencies which cause arthropathy in man setting up a corresponding change in women, represented by dysmenorrhœa.

(b) The inhibitory influence, instead of being merely impaired, may be completely suspended during pregnancy. Thus abortion may come to pass.

(c) The presence of such a centre with an inhibitory rather than a mere trophic function would explain why anæsthesia may not alone be unable to arrest the progress of labor but may actually facilitate expulsion.—*Brit. Med. Jour.*, April 9, 1892.

**Shotwell (W. E.) Is Uric Acid a Prime or Sole Factor in the Causation of Rheumatism?**—In my experience with rheumatic affections, I have so frequently noticed this excessive formation of uric acid, as shown by an examination of the urine, that I regard it as symptomatic of a tendency to rheumatic troubles, even before the patient has the attack. Uric acid is produced in the system by a stimulating, nitrogenous diet and the use of alcoholic beverages. In the treatment of rheumatic affections we first prohibit entirely, or allow very sparingly, according to the nature of the case and the condition of our patient, an animal diet and alcoholic beverages, especially wines and beers. Next we give the saline mixtures of potassa and soda and the salicylates. Why? Because clinical experience shows such the best course to pursue.

Does not this treatment lessen the quantity of uric acid, which, by its irritating influence upon the lower-grade tissues of the body, gives rise to the rheumatic attack, consequently checking or "curing" the rheumatism? A case of sciatica, due to rheumatism, remains quiescent so long as the excretion of uric acid is normal in quantity, but as soon as the urine shows an excess, exacerbations manifest themselves, which disappear as if by magic when the quantity is lessened to normal by a few doses of salicylate of soda or

carbonate of lithium—washing out, as it were, the excess of uric acid from the system.

If such be the case, as clinical experience tends to show, that uric acid in excess is a sole or prime factor in the causation of rheumatic affections, have we not the "key" of the trouble, whereby we may prevent a rheumatic attack in the education of our rheumatic patients to abstain from too free indulgence in an animal or nitrogenous diet and the imbibing of alcoholic beverages? Also, in the examination of their urine, as to quantity, appearance, hyperacidity, etc.; in the use of the mineral waters—Vichy, Seltzer, Carlsbad, etc.—as occasion may demand.—*Phila. Med. News*, Feb. 13th.

**Brodhurst (B. E.) on Gonorrhœal Rheumatism: Its Effects and Treatment.**—It is certain that gonorrhœal or urethral rheumatism is in the first instance invariably preceded by a specific discharge. Subsequent attacks may or may not be preceded by a discharge; but the first attack is always preceded by a specific urethral discharge. A second attack of articular inflammation may be caused by the use of the bougie or by an act of coition, or by any other form of irritation of the urethral canal.

Exposure to wet and cold weather, the gonorrhœal discharge being present or being about to appear, tends to induce this form of articular inflammation. Considerable effusion into the affected joints takes place, accompanied with great pain; but, although tension may be very great, suppuration never occurs. Many joints usually become inflamed simultaneously, and all may recover perfectly and without leaving behind any ill results. Every fresh attack of inflammation takes more effect than the preceding one, and seems to be more virulent in its character; and it is probable that although on two occasions, perhaps, the joints may resume their normal appearance and their functions, a third attack may leave the patient lamed. It is common that all the joints shall recover well except one, but that one remains stiff and immovable.

When pain is first felt and swelling appears, the affected joints should be wrapped in lint covered with mercurial ointment, and they should be bandaged as firmly as can be easily borne, and the patient should be brought rapidly under the influence of

mercury, preferably by inunction. With such treatment pain and swelling quickly disappear, and the joints resume their normal condition. At this stage passive motion should be instituted, to ascertain that the motion of any affected joint is free; for lymph will have been deposited on the synovial membranes, through which adhesions form. These bands soon become firm, and resist any attempt that a patient himself can make to move the joint.

The mercurial treatment to which I have referred, if resorted to in the onset of the inflammatory stage, never fails; swelling subsides as the mercury takes effect.

When, after inflammation has ceased, and passive motion has not been employed, adhesions remain and become firm, force is needed to restore mobility. If this force is employed in extending the limb, dislocation may be produced, or at least some displacement of the articular surfaces may occur. Force should therefore always be used in the direction of flexion. When force is thus employed, no injury can accrue to any structure. And, if this operation have been long delayed, so that contraction of the flexor muscles cannot otherwise be overcome, their tendons should be divided. But before force is applied to rupture adhesions, the punctured wounds should be allowed to heal; for otherwise they may readily be extended into lacerated wounds from three to four inches in length.

In this manner mobility is very quickly regained. The operation is entirely successful, and it ranks among the most satisfactory in the whole range of surgery.—*Med. Press and Circular*, March 12, 1892.

**Althaus (J.) on Post-Mortem Appearances of the Brain of Influenza Patients.**—Records are given of twelve cases. In the first case there was great hyperæmia in the right hemisphere of the cerebellum, with hemorrhagic spots, and complete softening of the medullary matter. In the second case there was found copious hemorrhage at the base of the brain, proceeding from an aneurism of the basilar artery, there being liquid blood in the right lateral ventricle, and granular ependymitis. In the third case the dura mater was completely adherent to the skull, and the pia mater thickened and strongly congested. In the fourth case there was acute non-suppurating leptomeningitis; the pia mater showed strong

oedematous infiltration at the convexity as well as at the base, the vessels being very turgid. In the next three cases, where the patients, being previously consumptive, had died of rapid progress of the tuberculosis subsequent to the attack of grip, the condition of the brain is not mentioned. In the eighth case there was hemorrhagic pachymeningitis, chiefly in the middle fossæ. In the ninth case there was general subarachnoid oedema. In the tenth case, which was that of a tubercular and alcoholized person, there was strong subarachnoid oedema. The left Sylvian artery was surrounded by a loose non-transparent tissue, and showed numerous miliary tubercles in its tract. On the right side the same lesions were found, although not so pronounced. There were a few miliary tubercles on the blood-vessels of the anterior surface of the pons and internal hydrocephalus. In the eleventh case slight subarachnoid oedema and lepto-meningitis with hyperæmia were discovered. Finally, in the twelfth case, the pia mater was found covered with a thick layer of greenish, thick, and ropy pus on its whole surface, at the base as well as at the convexity, and the membrane was strongly oedematous. The lateral ventricles were likewise found to be filled with the same kind of pus. Every one must admit that such a series of records is very significant, and cannot be simply due to coincidence, more especially when it is remembered that the cases were not of inmates of an asylum, but of persons indiscriminately admitted for severe forms of grip into a general hospital.—*London Lancet*, March 5, 1892.

**Frost (E. F.) on the Odor of Influenza.**—While attending, about two years ago, a family of eleven, all down with the "grippe," my attention was called by the mother to a peculiar smell or odor which she described as most disagreeable and offensive, and which she attributed to the disease. They not being particularly careful as to their personal hygiene, I paid no attention at the time to the matter. Subsequently I was called to attend a man, aged thirty, of Irish descent, who, though about the house, suffered with fever and attending symptoms of aches and pains, cough, and muco-purulent expectoration, about whom there was so strong and offensive an odor that the whole room in which he lived was strongly scented. From his occupation as a farmer, I thought at the

time that the odor was probably incidental to his calling, and that he had possibly been working in an unclean hen-house, or possibly in musty grain. Soon after, a niece of the above was stricken with the disease, and in her case I noticed the same odor. From that time to the present I have paid close attention to this symptom, and have noticed its constancy in those cases of undoubted identity as cases of the epidemic, and have found it most marked in patients of Irish descent, but less marked, yet present, in some of those of non-Irish descent.

The odor has the same characteristic in all the cases, namely, the smell of "blue musty meal," in the words of one patient; to my nose, a mixed odor of foul hen-house and musty meal. The odor was particularly noticeable in the clothing, the sweat, the sputum, in one case in the vomit, and in nearly all cases the air of the sick-room was most foul from the odor.

It is with considerable hesitancy that I write of this matter, but I feel sure of my ground, in that the odor is distinct from the ordinary smell of fevers, and that it is, when present, characteristic of the disease. In fact, so true has this been in my experience, that when, at the first meeting with a patient having the odor, a snap-diagnosis was made, the diagnosis has been confirmed by the history, the concurrent symptoms, and progress of the case.—*N.Y. Medical Record*, Feb. 20, 1892.

**Tuholske (H.) on La Grippe and Suppuration.**—The author found in surgical practice that suppuration was of frequent occurrence in wounds treated under the most rigid antiseptic precautions, in patients affected with *la grippe* before the operation, or in whom it developed during the healing process.

In the latter part of October he removed an ovarian tumor from a woman who had been brought to him from the country, apparently in good health. She passed the first five days in a typically good condition; then there was a rise of temperature, with the onset of *la grippe*. Patient complained of burning along the wound-margin, and on inspection we found stitch-abscesses all along the sutures, the cuticle raised, with sero-purulent fluid under it. There was a surprise! He had operated amidst surroundings ideally proper, in a hospital unexcelled in arrangements for bringing about perfect

wound-asepsis. A careful review with his assistant and nurses, of all possible sources of infection during the operation, gave negative results. His patient recovered, after eight weeks of protracted suppuration.

When the same occurred after the removal of a small lipoma in a patient who had had *la grippe*, his attention was strongly directed to that disease as the cause of the suppuration. His experience now became quite extensive, and in the last three months he has seen more suppuration after operations than in the past five years. When calling attention to the fact, he was pleased to hear other surgeons recall a similar experience; especially unique was that of Prof. Steele, who, after a simple tenotomy at the Children's Hospital, saw suppuration at the little patient's heel, and extensive sloughing of the skin. From all this he concludes that the *grippe* germ, the diplococcus of Pfeiffer, is either a pus-producer in itself, or that its pot-  
maines so affect wounded tissues as to make them fall an easy prey to pus-producers present in the circulation. At any rate it would appear that surgical operations of choice had better be deferred to more propitious times. The sole object of this brief statement is to communicate that result of my observations for comparison.—*Medical Fortnightly*, Feb. 15, 1892.

**Mason (C. F.) on Cutaneous Eruptions in Influenza.**—Cases I. and II. A. B., aged six months; first seen January 1, 1892. Mother says child has been sick several days with fever, cough, vomiting, and constipation, and to-day a rash has appeared, which she thinks is measles. Upon examination, I found tongue thickly coated, chest, abdomen, and back covered with a discrete eruption, pale, but exactly like that of a mild case of measles, and well-marked broncho-pneumonia; there was high fever, but not having a thermometer temperature was not taken; no redness of tongue or pharynx. Influenza was then prevalent; the eruption was the only point of resemblance to measles; there had been no measles within 150 miles of us for many months, and I diagnosed influenza, but nevertheless isolated the patient and took the same precaution as if the disease had been a contagious one. The next day the eruption had spread over the entire body, was confluent and much more vivid except upon the face; other symptoms as before.



The same day, January 2, 1892, a half-breed infant of about nine months was brought to me by its mother, a Shoshone Indian squaw, with exactly the same symptoms except the pneumonia, the eruption being most typical and everywhere confluent. This second case had been brought in that day from a "tepee" on Upper Big Wind River, about twenty-five miles distant, and I was informed by the mother that there were one or two other cases of the same nature in that region.

January 3d, the eruption in both children had almost entirely faded, and on the 4th was gone, without the slightest desquamation.

The second case I did not see after this date, but heard that the child made a good recovery. The first has been constantly under my observation, its recovery from the pneumonia being slow and difficult. In the family of the latter there were two other children, one of whom, with the father and mother, was subsequently affected with the characteristic symptoms of the grip, but without any eruption.

Case III. Nez-Percé, Shoshone Indian soldier, aged twenty-one and one half years; admitted to hospital, January 9, 1892. Complains of headache, cough, pains in the chest, and debility. Upon examination I found acute laryngo-bronchitis, a coated tongue, and a few small papules like those of acne upon face and chest; temperature 100°. The next morning, on visiting the ward, I was astonished to find his face, chest, and back covered with discrete superficial vesicles, many of them markedly umbilicated, but without inflammatory bases. Temperature: A. M. 99.6°, P. M. 102.8°; eyes slightly injected; complains only of severe frontal headache.

January 11th. Vesicles have become pustular; no new ones; feels much better. Temperature: A. M. 100.8°, P. M. 101.4°.

January 12th. Feels well; pustules rapidly drying up.

January 16th. Spots dried up rapidly, forming thin crusts, which dropped off, leaving no scar.

This case so closely resembled varicella that the patient was isolated for several days. However, the soldier had not been absent from the post; varicella had not been heard of in the country for many years, and I considered that disease excluded. The other symptoms were those of the grip, and my experience with the

two cases referred to above led me to make that diagnosis here also.—*Bost. Med. and Surg. Jour.*, Feb. 18, 1892.

**Judkins (W.) on Sympathetic Morning Sickness in the Male.**—The writer was called to see a man suddenly taken ill, and found him pale and hardly able to speak. Stimulants of any kind were emphatically declined. Inquiry revealed the fact that ever since his supper the evening before, nausea and vomiting were marked; that for the preceding week or ten days he had been irregular at meals, with no appetite, and poor health. The different medicaments ordered were of little or no benefit. About this time the wife spoke to me regarding a symptom in her own case that had been present in two previous pregnancies—that of drowsiness. She could go to sleep at any time of the day, and at any place. With that exception, she was never in better health than when pregnant. She had, as a rule, nursed her children until fourteen and eighteen months old. Had never seen a menstrual flow but the first and second month after marriage, consequently there was no data to go upon in that particular. (At the present time motion is present, and confinement is expected in May.) What in my hands has proved efficacious in relieving nausea in ladies, when frequent, was now ordered for the husband, *i.e.*, pop-corn. It gave him relief at once, and for days and weeks he lived on nothing else. He is now in the far West on a trip, enjoying good health. I learn that during the previous pregnancies the gentleman was similarly affected, and from an elderly member of the family I am informed that the father was also quite sick when his wife was carrying my patient during the early months of her pregnancy, going to show there is something in the law of heredity.—*Cincin. Lan.-Clinic*, March 26, 1892.

**Shepard (J. C.) on Milk-Sickness.**—It is confined to very limited localities in the Southern and Southwestern States. The author says:

For the purposes of this paper, I will define milk-sickness to be a disease caused by the use of the milk of cows themselves sick with a peculiar disease. The disease may also be contracted by the use of the butter, cheese, or flesh of the cow, and it has been claimed by some that the disease is sometimes contracted directly from the poison, whatever that may be,

without its having been transmitted through the cow, but this lacks confirmation. And it may be well to remember that other animals than the cow also suffer with the same disease.

As to the nature of the disease, I offer no opinion, but I believe it is generally regarded as a fever, although I do not think the febrile movement is generally excessive. It may be so sometimes.

The characteristic symptoms of the disease are great irritation of the stomach, obstinate constipation of the bowels, retraction of the abdomen, a peculiarly disagreeable and indescribable odor from the breath or person of the patient, and a fever more or less severe.

As to the cause of the disease there is no doubt of its being contracted from the milk of the cow, but the change wrought in the milk rendering it so hurtful to the human subject is not known.

Of late years milk has been most carefully and scientifically investigated by Victor Vaughan, of the University of Michigan, and others, and under certain circumstances a poison has been found in it, which I believe they call *tyrotoxin*, but this does not produce milk-sickness, so far as is yet known.

The disease often terminates fatally, sometimes by way of coma, but not always so.

I have never seen a post-mortem examination of a case of the disease.

Some think that the poison causing this disease in the cow is of vegetable origin. To my mind this is not probable, because, in the first place, there is no known vegetable poison that would produce the characteristic symptoms of the disease; and, in the next place, there is no known vegetable that would confine itself to a habitat in so small a locality for generations, while the surrounding soil was the same as in the given locality, and the sunshine, rain, and air were the same in both localities. It is claimed by others that the poison is of animal origin. But the same reasoning as the above is applicable to this theory also. That is, that there is no known animal poison that would produce the disease, neither is there any known animal that would confine itself to so limited a locality for an indefinite time.

That the disease is of mineral origin seems the most plausible, the most in accordance with the facts of the case. But

there is no known mineral that would produce the disease as per characteristic symptoms, neither is it known that there is any poisonous mineral in the infected localities.

In regard to this question of etiology, I pretend to no opinion, and yet it seems to me that to one who has seen a case of "lead poisoning," a case of milk-sickness in the human subject and a case of *trembles* in the cow would remind him of the former; that he would find in all three of the cases a common physiognomy, so to speak. But there may be some other metal or mineral that would meet the demands of the case better than lead.—*Nashville Four. Med. and Surg.*, Jan., 1892.

**Lovett (R. W.) on a Case of Torticollis Due to Hæmatoma of the Sterno-Mastoid Muscle.**—Alexander P., six weeks old, was brought to the Carney Hospital Out-Patient Department, in August, 1890, on account of a swelling which the mother had noticed in the neck. The child was healthy and well developed, and was born by an easy labor.

The examination showed a bunch in the left sterno-mastoid muscle, about the size of a hazel-nut. The muscle was slightly contracted, as a result of which the face was turned somewhat to the right. The head could be put into the normal position, but could not be over-corrected. The tumor was plainly to be felt, and did not seem to involve the surrounding structures, but to be limited strictly to the muscle. The case was seen by Dr. Burrell and Dr. Post, and the child was put upon general treatment, which had little or no effect. The tumor gradually disappeared, and at the end of two months was no larger than a very small cherry.

The child was not seen again until sent for by the writer in January, 1892. The child now presents a well-marked case of torticollis due to the contraction of the left sterno-mastoid muscle. The head cannot be placed in a correct position, there is some asymmetry of the eyes, the tumor has entirely disappeared, and were it not for the early history, the case would pass for a routine one of torticollis.

The case is presented thus in detail because of the statement made by Dr. Whitman, in his recent exhaustive paper, that no case of torticollis due to hæmatoma of the sterno-mastoid muscle is on record.—*Bost. Med. and Surg. Four.*, March 31, 1892.

MISCELLANY.

**Ferguson (John) on Paralysis Following Acute Diseases.**—The writer is of the opinion that acute diseases act on the nervous matter in the following manner :

1. That these paralyses are due to the direct action of the virus of the disease.
2. That they are due to some poison left in the system by the disease, and that acts after the disease itself has disappeared.
3. That they are due to some other poison that acts conjointly, or in association, with that of the disease, but may act on those who have not had the disease.

After a report of thirteen cases of multiple and isolated peripheral neuritis as a result of diphtheria, typhoid fever, measles, or "la grippe," he concludes :

1. That paralysis following acute contagious diseases is not due to some associated poison, as held by Boissarie.

2. That some of the cases of paralysis are due to the direct action of the specific poison of the disease.

3. That some cases of paralysis come on at a date when we can no longer believe that the specific poison of the disease is in activity. These cases may be due to : *a*, some poison or impurity left in the system ; or to, *b*, some weakened and unstable state of the nervous tissue, caused by the disease, and which cold, wet, or fatigue readily overthrows. In this way a paralysis results, as might have been the case, after such exposure, even though there had been no previous illness ; but with greater readiness in those recently recovered from some acute attack, as typhoid fever or diphtheria.—*London Lancet*, Jan. 9, 1892.

**Kirk (C. D.) on Eclampsia : Which is the Remedy ?**—I am quite sure that veratrum and morphine will give relief, so far as the convulsions are concerned, in every case that is amenable to any remedy now known to the profession. The case associated with small, weak, rapid pulse and cold extremities, cannot be relieved with veratrum in any size dose, but will surely sink under the influence of a large dose, and without the timely use of active stimulants will die very quickly. It is strange that veratrum may be given in ten-drop doses every fifteen to thirty minutes for the relief of one case, whilst the single dose of ten drops will prove fatal in another ; yet we cannot discover any in-

difference in the two cases so far as the convulsions are concerned. Morphine is the remedy for the one and veratrum for the other, or the case with full, strong pulse. If the physician will always notice the pulse and give his remedies accordingly, he will not fail to control the convulsions. The cases with small, weak pulse, or full pulse without power, generally have less coma but more gastric derangement ; they are relieved by hypodermic injections of three eighths of a grain of morphine, which proves to be everything that is needed. It fills the place of stimulants and relaxants : in fine, it is *the* remedy. But if there is full, strong pulse, veratrum should be given as mentioned above. It is a specific for that pathological condition.—*St. Louis Clinique*, April, 1892.

**Brooks (W. H.) on Three Cases of Hæmatoma of the Vulva Following Labor.**—In the first case there was no hemorrhage, and everything seemed normal until about five hours after delivery when a small tumor on left side of vulva was noted, accompanied by shooting pains in back and legs. Tumor increased in size till nearly as large as child's head. On the fifth day the temperature registered 103.5°. A free incision was made and about a half pint of blood clots streaked with pus was washed out. Antiseptic dressings applied. Recovery uneventful. In Case II. the tumor appeared during the second stage on the right labium, but increased slowly in size, hence did not interfere with delivery. Before expulsion of the placenta a fresh extravasation occurred and tumor increased rapidly. The vagina was packed with ice which controlled the hemorrhage. A free incision was made on the sixth day and a satisfactory recovery. In Case III. the tumor appeared fifteen hours after labor—cold checked the hemorrhage. This swelling was about the size of an almond and was gradually absorbed.—*Md. Med. Jour.*, Feb. 27, 1892.

**Robertson (W.) on the Electric Light in Antral Diseases, etc.**—In health there is seen under the lower eyelid a large light spot about the size and shape of an almond. The middle and inferior turbinateds are also clearly illuminated when the lamp is placed in the mouth. Such is not the case in empyema of the

antrum. In disease of the frontal sinus the lamp placed well under the orbital ridge throws out a dark shadow over the region of the sinus. In ethmoid disease two bright strips of illumination parallel to each other may be seen on either side of the nasal cartilage. The details of an interesting case of antral disease are given, in which normal illumination was restored by operation. The duration of treatment may thus be governed by the extent to which normal transparency reappears. The shadow may remain even after removal of secretion in consequence of thickening of the lining membrane. In cases of recurrent polypi, pus may not exist in the antrum, yet its mucose may be implicated in cellular infiltration or in a condition of polypoid degeneration, which can be relieved only by perforation of the antrum and the establishment of thorough ventilation and drainage. Two interesting cases indicative of a probable connection between so-called "ozæna" (atrophic rhinitis) and antral disease are narrated. The results of treatment, as yet incomplete, encourage the hope that in some of these cases at least the origin of this intractable disease may be reached by attacking the antrum.—*The Four. of Laryngol. and Rhinol.*, etc., Feb., March, April, 1892.

Barrett (J. W.) and Webster (P.) on Retention of a Foreign Body in the Eye for Eleven Years; Continued Irritation in Injured Eye; No Sympathetic Ophthalmitis.—A blacksmith, while working at an anvil eleven years before consultation, felt a sharp blow on the left eye, and immediately lost sight in it. For three months it was extremely painful. And at times since for a day or so pain and irritation would appear but troubling him only to a trifling extent until within five weeks, when severe pain, photophobia, and lachrymation came on with ciliary tenderness. Pupil irregular, blocked by dense tissue, tension +, vision perception of light only. Iridectomy gained nothing, so the globe was enucleated, and a chip of iron found in the bottom of the vitreous chamber, weighing nearly a grain and the size of the head of a lucifer match. The writers believe that sympathetic ophthalmia is a comparatively rare disease, and have determined to put on record in brief every case they note in which the conditions usually producing sympathetic disease are present without its production,

and also all cases in which it appears.—*Austral. Med. Four.*, Dec. 15, 1891.

Hale (E. M.) on Cancer (?) or Ulceration of the Stomach Cured by a Diet of Frozen Milk.—The subject was an old gentleman between sixty and seventy years of age. He was given up to die by his physicians in a small town in Indiana. He was removed to Chicago to end his days at the residence of his daughter.

He had not been able to retain any food on his stomach for many months. Rectal feeding had been tried, but not very successfully. He was greatly emaciated, and almost demented. At the earnest request of his daughter I took charge of the case, but first called in consultation the late Dr. H. A. Johnson, whose diagnosis was *cancer of the pylorus*. A distinct nodular swelling was found in that region. For a time he was fed by rectal injections of Rose's peptonized beef and Cornish's preparation. At every attempt to give any liquid food by the mouth intense gastralgia and vomiting followed.

To relieve the pain cocaine was tried, without effect, as were all other medicines. Ice-cream was tried, but it invariably caused such pain that its use was abandoned. He craved milk, and could sometimes take a small quantity ice-cold. It occurred to me to try *frozen milk*, and I found he could take half an ounce at one time with less pain than any other food.

Having used *codeine sulph.* in a similar case with great relief, in a patient who eventually died from cancer of the pylorus, I prescribed a syrup of codeine sulph. (one half grain in each teaspoonful of syrup of tolu); he was given a teaspoonful every six hours, day and night.

After this was commenced he could take one ounce of frozen milk every two hours without suffering from gastralgia or vomiting. The milk when frozen was not *hard*, but soft and friable. The best fresh New Jersey milk was used. He steadily improved under this treatment. Rectal alimentation was abandoned. For six weeks he used no other food. Then the codeine was gradually abandoned, and beef-tea gradually given, alternating with the frozen milk. At the end of three months he went back to his Indiana home cured. He could eat any food he desired. He lived five years in good health. He died of typhoid fever.—*N. Y. Med. Times*, Mar., 1892.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## EDITORIAL NOTICE.

We regret to announce the resignation from the EPITOME staff of Dr. John Ridlon, who for several years has so ably conducted the department of orthopædic surgery. The editor desires to express his sincere thanks to Dr. Ridlon for his valuable assistance extending now over so long a period. The best wishes of his many friends will follow him to Chicago,

to which city he has decided to remove, and where he will continue the practice of orthopædic work. This department of the EPITOME will be hereafter conducted by Dr. Henry L. Shively, late House Surgeon at the Presbyterian Hospital and now Assistant Surgeon to the N. Y. Orthopedic Hospital and Dispensary.

## LEADING ARTICLE.

### ON CONTAGION IN TUBERCULOSIS.

Dr. T. J. Mays (*Climatologist*, February, 1892) refuses to accept the contagion theory of phthisis. The inference that a disease originates or is transmitted by contagion in the human family because it can be communicated by inoculation in the lower animals is fallacious. Cornet's statistics of the mortality from phthisis in the nursing orders of Prussia, 62.9 per cent., simply illustrates the prevalence of the disease among persons who lead sedentary lives. The death-rate among German prisoners is even higher. The death-rate from phthisis among American firemen, 53 per cent., shows that anything which depresses the vitality of the constitution can produce phthisis regardless of the absence or presence of exposure to the tubercle bacillus. The author asserts that he has never seen a case of contagion reported, in which the evidence thereof is positive, although probability does sometimes exist. The statistics of hospitals for consumptives during long numbers of years show that remarkably few cases occur among the physicians and

attendants. Similar statistics are taken from resorts frequented by consumptives. The vigorous laws in force in Naples from 1782 to about 1850 to prevent the spread of phthisis by contagion had no influence in diminishing the death-rate from the disease. "If these data mean anything, they assert positively that phthisis does not arise by being transmitted from person to person through contagion."

In opening a discussion on tuberculosis as an infectious disease in the Glasgow Chirurg. Soc., Dr. J. L. Steven reviewed briefly the pathological and clinical evidence which shows that infection has a great deal to do with the occurrence of tubercle. In three cases among 113 cases of consumption observed in dispensary practice by the author, infection appeared very probable. Family history was obtained in 70 cases: in 39 there was history of tubercle, in 31 there was no tubercular family history. In 14 of the 39 cases the tubercular element was confined to brothers and sisters of the patient, in 9 cases it occurred in one or both parents, and in 12 cases in

one or both parents and children. It is easier to explain the frequent occurrence of the disease in a family by infection than by heredity. Infection occurs mainly through desiccated tubercular discharges floating in the air, and through contaminated food, usually milk or butcher's meat.

In the course of the discussion Dr. A. Robertson, admitting the probability, almost certainty, of infection in tuberculosis, thought that with proper care of tubercular discharges there was slight risk of infection, even when there was a very moderate supply of fresh air.—*Glasgow Med. Journ.*, Jan., 1892.

Dr. V. Pagliano reports (*Marseille-Médical*, April, 1892) a fatal case of tubular laryngitis and pulmonary phthisis in a young man twenty years of age. His mother was suffering at the same time with pulmonary phthisis, and a sister had died of the same disease six months previously. They had begun to cough at the same time. The father of the family was the only member of the family not affected. The family history was free from tubercular taint, but they had occupied during a few years an unlighted, unventilated lodging in which a consumptive had previously lived and died.

Dr. L. S. De Forest (*Climatologist*, Nov., 1891) analyzed 2,609 fatal cases of tuberculosis in New Haven, the residences of which were known. They were localized in three principal districts. Sixteen per cent. of the houses infected had more than one case each; 70 houses had 3 cases; 28 had 4; 2 had 5; 3 had respectively 6, 7, and 9 cases. In one of the districts the 514 cases occurred in 361 of the 650 houses. Twenty-seven per cent. of the houses here had more than one case. Generally the infected houses adjoined or were in close proximity to each other. As the reported number of deaths from tubercular meningitis was unnaturally small, and as small children would be especially liable to house infection, it was supposed that many such cases had been returned simply as "meningitis." Of the 300 deaths in children (under five years of age) returned as meningitic, 32½ per cent. occurred in infected houses. Of 100 ambulant cases of phthisis treated at the City Dispensary 52 were at the time of entry living in infected houses.

Dr. T. M. Prudden (*N. Y. Med. Journ.*, April 16, 1892), states concisely the elements of contagion in tuberculosis. The

tubercle bacillus does not grow in nature outside of the bodies of men and animals in which it has started the disease. While it may be destroyed by boiling, by many chemical agents, or by prolonged exposure to sunlight, it may retain its virulence after months of drying, and ordinary exposure to the weather, and burial in the earth. It is especially present in the flesh, milk, and discharges of tubercular cattle, and in the excretions of tubercular people, particularly the sputum. The bacilli, imprisoned while the sputum remains moist, escape when it is pulverized, and mingle with other dust. The breath of consumptives, apart from solid particles cast off in coughing, conveys no germs. There are contributory factors in the causation of the disease, as inherited and acquired vulnerability, predisposing environment, etc. But without the tubercle bacillus, there can be no tuberculosis. It is proved beyond doubt that virulent bacilli are present in the dust of the air of places where uncleanly consumptives live, and that close association with such persons, without intelligent precautions, frequently involves acquirement of the disease. Hereditary transmission is often only household poisoning or entailed vulnerability. However, the main point is, that tuberculosis is an infectious disease, communicable from one person to another—contagious,—and that the chief element of its conveyance is the uncared-for sputum of the victims of pulmonary tuberculosis. Knowing the contagium of the disease we are in a position to study the conditions under which degrees of contagiousness may vary in nature or be varied by art.

An interesting paper by R. W. Philip (*Edinb. Med. Jour.*, May, 1892.) is an analysis of 1,000 cases of pulmonary tuberculosis which were observed by the author during a long period. The well-known influence of occupation, of ignorance of hygienic conditions and laws, and negligence in the application of them, of insufficiency of fresh air and exercise, confinement in badly ventilated and over-heated apartments, the inhalation of dust, and, to a less degree, exposure to unfavorable and irregular conditions of atmosphere, frequent child-bearing, etc., is well shown. Sixty-four per cent. of the cases were male, 36 female. Most of the cases occurred between the ages of twenty and thirty. The process seems to be more chronic in the

male than in the female. It appears to occur with practically equal frequency in persons of all heights. The most important part of the paper relates to heredity and contagion. In 23.3 per cent. a definite family history of tuberculosis was traced, in 5 per cent. the history was doubtful, and in 70 per cent. was reported free from tubercular taint. The percentage with hereditary history probably includes examples of contagion. The influence of heredity is probably in the transmission of less resistant tissues. Six and seven tenths per cent. of the cases afforded definite, almost incontrovertible, evidence of contagion: infection from husband to wife and conversely, from children to parents and conversely, from brothers to sisters and conversely, from companions not related. The instances of *probable* infection might be largely increased. In a map of Edinburgh the residences of the cases of tuberculosis coming under the author's observation during three years were noted by red dots. Frequently several cases occurred in the same house or floor. Some of the older parts of the city show an almost continuous coloring of red. In 2.3 per cent. phthisis had a basal commencement. Chill was cited as the direct cause in 12.8 per cent.; "bronchitis" in 12.4 per cent. In some of the latter cases the process was probably already tubercular. In 5.6 per cent. connection between tuberculosis and the inhalation of dust particles was traced. The onset of the disease was attributed to an attack of pleurisy in 8.2 per cent. There are doubts as to the sequence of the lesions in some cases. No close connection between lobar pneumonia and the development of phthisis seems to exist. In 4.4 per cent. the onset of tubercular disease was distinctly traced to an attack of influenza. There was complication of the larynx in 10 per cent.; special valvular lesion of the heart was noted in 2 per cent. Four hundred and sixty-nine cases were followed continuously during six months of these 24.94 per cent. did well; 34.75 per cent. improved; 24.1 per cent. remained about the same; 16.2 per cent. died.

Dr. A. F. Loomis writing on the "Histological Changes in Cured Phthisis," (*Climatologist*, Jan., 1892,) states that the lungs in 8 per cent. of 524 post-mortem examinations on persons dying of non-tubercular disease collected by Dr. H. P. Loomis, pre-

sented evidences of cured tuberculosis. In 38 of the 44 cases the apex of the affected lung was adherent to the costal pleura and in it were scattered fibrous modules varying in size and number. Cheesy and calcareous masses were found in the central part of the nodules. Small cavities inclosing soft, cretaceous masses were present in six instances. Lamellæ of fibrous tissue surrounded the nodules. Histologically the nodules were composed of more or less organized fibrous tissue; frequently new connective tissue was just developing around them. The fibrosis developed in one of three ways. First, by round-cell infiltration of the interlobular connective tissue. Second, by round-cell infiltration of the alveolar walls. Third, by round-cell infiltration around bronchi and blood-vessels. Lines of fibroid tissue could be traced to the pleura. The fibroid processes were developed in the normal connective tissue in such a manner as to obliterate the avenue of tubercular infection and were not furnished by the tubercular tissues. Recent fibrosis was surrounded by an area of intense hyperæmia. Tubercle bacilli could be found only in one or two sections. Inoculation experiments were made in twelve rabbits with the contents of the larger nodules of twelve lungs. In five cases the presence of tubercle bacilli was proved by the development of tubercular lesions, but in no case was the lesion sufficiently intense to produce general tuberculosis. It seems that the development of fibroid processes around tubercular lesions is the only method by which the latter can be arrested. The reason that this separative process occurs only in a limited number of cases is to be found in an antagonism between the fibroid and strumous diatheses. Chemical experience indicates a relative immunity possessed by arthritic patients as regards tuberculosis. Many observations seem to prove that in a patient whose parents suffered from general fibrosis, tuberculosis tends to a chronic course and cure. Four cases are related, illustrating respectively the inhibitory influence on phthisis, of gout, acute arthritis, cardio-vascular and renal fibrosis, and cardio-vascular disease associated with lead-poisoning. Of seventy cases of cured phthisis under the author's observation, fifty-two presented well marked evidences of general fibrosis, and Dr. Trudeau reported twenty-one cases of recovery in which

there was arthritic fibrosis in the patients or their parents. The prognosis of tuberculosis is therefore largely influenced by hereditary diathetic tendencies.

**On the "Rest Cure" in Incipient Phthisis.**—In a paper on this subject read before the El Paso County Medical Society Dr. J. M. Keating (*Climatologist*, Jan., 1892) recalls a few cases treated with Dr. Weir Mitchell's "rest cure" with good results. All the elements of the rest cure should be employed; rest in its true sense of body and mind, massage, electricity, nourishment pushed to its full extent, and the restoration of the functions of secretion and elimination. The "cure" increases nutrition and establishes a force of resistance which will enable the patient to benefit by open and vigorous exercise.

In the discussion which followed, the opinion was unanimously expressed that more or less complete rest, largely in the open air, combined in some cases with massage, is of great importance in the treatment of phthisis, particularly while the disease is progressing. Over-fatigue is injurious to the consumptive: it appears to be especially so in Colorado, and there the danger point seems to be more quickly reached. Any exercise, however slight, which is followed by a rise of temperature, loss of appetite, or a condition of fatigue from which recovery is not rapid, is too great. Patients coming from the East should be cautioned by their physicians against taking the violent exercise which many of them do take on their arrival in Colorado. Dr. Strickler advocated rest not only of the body but of the lung, which he endeavors to secure by strapping the affected side.

Concerning Prognosis and Treatment, L. H. Petit writes as follows (*Union Méd.*, April 14-16, 1892): Prognosis depends on the following factors: 1. The constitution of the patient, which, other things being equal, is the most important element in prognosis and treatment. (1) It is most favorable in patients who, born of arthritic parents, have "accidentally" contracted the disease. (2) Patients who, born of arthritic parents, are affected with exhausting disease as syphilis poorly cared for. (3) Patients born of one tubercular and one arthritic parent. (4) Patients with full hereditary taint. (5) Patients attacked with tuberculosis when in a state of cachexia dependent on severe disease,

as diabetes, albuminuria, syphilis, etc. Those belonging to the first four categories are curable with greater or less chance of cure. 2. The conditions of the organs, especially the lungs, digestive tract, heart, liver, and kidneys. Tachycardia is ominous. 3. The *morale* of the patient is very important. 4. The environment. The treatment consists in the employment as far as possible of: 1. Continuous residence in pure, healthy air, with surroundings capable of maintaining the *morale* of the patient. 2. Abundant and strengthening alimentation, mainly fresh meat. 3. Administration of creasote by inhalation, by hypodermic injections (objectionable) or by the stomach, in considerable quantity. Iodoform, cod-liver oil, arsenic, etc., may be added. 4. Revulsion over the pulmonary lesion or in hepatic region.

**Hericourt** (*Arch. Gén. de Méd.*, April, 1892), reviews several of the cases of tuberculosis (reported by various observers) in which subcutaneous injections of dogs' serum were made. Evidently the serum has no truly curative action, but it is a valuable tonic. In cases where nutrition was profoundly affected, and where classic treatment failed, the injections caused rapid increase of appetite, improvement of digestion, and increase of weight and strength. But laboratory experiments of the author and M. Richet justified expectation of greater clinical results. The experiments were based on the principle that transfusion of (a certain quantity of) the blood of an animal refractory to a microbe into a susceptible animal confers a power of resistance on the latter animal. This vaccinating and curative action of the blood of refractory animals has been illustrated in regard to several animal diseases. The author's experiments proved that the development of tuberculosis could be delayed in rabbits if they were inoculated with dogs' serum, and that the process could be arrested in rabbits if they were inoculated with blood taken from a dog previously subjected to infection with tubercle bacilli. The inoculations were made with the chicken-tuberculosis, as it is easily cultivated, and as the rabbit is susceptible, and the dog is refractory, to it. Since the experiments were made tuberculosis of the fowl has been distinguished from human tuberculosis. To the latter the dog is not at all refractory. Therefore in employing the serum of dogs against tuberculosis in



man, the serum of a refractory animal was not used as the principle requires. No warm-blooded animal is naturally refractory to human tuberculosis. In December last, four dogs, two of which had been previously inoculated with cultures of the bacilli of fowl-tuberculosis, received injections of a culture of virulent human tubercle bacilli. The inoculated dogs are still alive (April) and healthy; the other two died in twenty days. Therefore fowl-tuberculosis is apparently the natural vaccine against human tuberculosis,—in the dog at least. An animal refractory to human tuberculosis has been thus created. The author will in the future make clinical observations on the treatment of tuberculosis with injections of the serum of dogs *vaccinated against human tuberculosis*.—*Archiv. Gén. de Méd.*, April, 1892.

Concerning Tuberculin, Ruedi (ed. *Phil. Med. News*, April 6, 1892) is recorded as having presented statistics of 60 cases treated at Davos with Koch's tuberculin. In 4 cases the injections were made for diagnostic purposes. Of the remaining 56, 2 were greatly improved; 16 improved; 30 remained the same, and 8 became worse. These results are unfavorable, as the results from one hundred cases treated by the author the same winter and under the same conditions in Davos, but without employing tuberculin, were decidedly better. The diagnostic value of tuberculin is not great. There seems to be something of promise in the treatment, but its applicability is limited.—*Practitioner*, March 1892.

**Tuberculocidin.**—Klebs reported that by precipitation with platinum chloride and the alkaloid re-agents he was able to separate from tuberculin the substances on which its deleterious effects depended, leaving in solution an albumose, which he believed to be the curative agent, and to which he has given the name *alexin* or *tuberculocidin*. Klebs believes that the efficacy of tuberculocidin depends upon an influence exerted on the tubercle bacilli, resulting in their degeneration. It does not cause necrosis of tubercular tissue, dissemination of bacilli, or the development of miliary tuberculosis. Unless the dose be excessive, there is no febrile reaction. In man the initial dose of tuberculocidin is about 0.002 gm. and is increased, if no unpleasant symptoms are produced, to 0.1 or 0.15 gm. The injections should be made

daily for a month, and then be intermitted for a month, to be renewed or not, according to the indications present. Other therapeutic measures may be advantageously employed in conjunction with the injections. Of seventy-five cases treated with tuberculocidin in which a reasonable time had elapsed, fourteen were cured, forty-five were improved, fourteen remained unimproved, and two died. Complications were universally wanting.

Concerning prophylaxis and treatment, Kinnicutt says (*N. Y. Med. Rec.*, May 21, 1892): Infinitely more can be accomplished toward eliminating phthisis by using our knowledge of its etiology and prophylaxis than by all therapeutic measures at command. Sputa should be collected in suitable china, glass, or paper receptacles, which are daily disinfected by heat, or destroyed by fire. Chemical disinfection of the sputum is inefficient. Patients must be taught not to spit into handkerchiefs, or on floors, etc. Floors and walls of rooms occupied by consumptives should be scrubbed, not swept or dusted. Disinfection of milk and cream is important. Public sentiment should be instructed.

Koch's and Rosenbach's theories of the action of tuberculin are briefly reviewed. Hunter's modifications of tuberculin and Klebs' tuberculocidin are described. A rather large clinical experience of eighteen months convinces the author that "tuberculin contains a remedial principle." The remedial effects of treatment with the cantharidates are not sufficient to procure it a permanent place in the therapeutics of tuberculosis. The injection of the serum of dogs' blood certainly stimulates cell activity. The local injection of chloride of zinc, possibly useful in the treatment of tubercular joints or glands, does not seem to be applicable to the treatment of pulmonary tuberculosis.

The literature of the treatment (of tuberculosis with creasote) is exceptionally favorable to the therapeutic value of the drug. Its efficacy in hindering fermentation in the digestive tract, and thereby promoting appetite and digestion, is generally admitted. Local stimulation of the gastric and intestinal nerve filaments probably increases digestive secretions. Its supposed effects on secondary inflammatory exudations may be the result of improved nutrition. When inhaled, it may have a favorable local antiseptic and stim-

ulating influence on catarrhal processes. As it enters in the blood into combinations which have been shown experimentally to have no specific germicidal influence, it has no constitutional antiseptic action. Guaiacol carbonate, a neutral, tasteless, odorless salt, may be favorably substituted for creasote. Seifert and Hoelscher suppose that the favorable results from the use of creasote preparations are due to their influence in assisting the elimination of the toxic products of the specific disease process.

Seven cases of well marked phthisis were treated with Hunter's modified tuberculin. Three cases were under treatment three months; in two of them there was no appreciable change in the pulmonary lesion, in the third the improvement in this as in all respects was most marked. In the four remaining cases, one was markedly improved, one was distinctly improved, one was not improved, and in one the disease was arrested at least temporarily. By improvement is meant marked diminution of phys-

ical signs as well as of constitutional symptoms. Stimulation of the nutritive processes is not so marked as the effect on the specific lesions.

Large daily doses of creasote were given in five cases and subcutaneous injections of carbonate of guaiacol in seven cases. There was little change in the physical signs, or the lesions increased. Night sweats were affected favorably. One case improved greatly in general condition. In most of the cases the weight remained about the same. Guaiacol and creasote can be given in large doses without injurious effect; such doses apparently possess no advantage over much smaller doses. Subcutaneous injections of the drug possess no advantage over administration by the mouth. Favorable results can be expected only by its continued and prolonged use, and whatever beneficial influence it may exert can be effected with a comparatively small dose.

ALEXANDER H. TRAVIS, M. D.

## RECENT CONTRIBUTIONS TO FRENCH LITERATURE.

**Hoegyes on Classification of Diphtheria.**—Hoegyes divides diphtheritic cases as follows:

1. Toxic Diphtheria. The local phenomena are slight. The false membranes are circumscribed and disappear at the end of five or six hours, sometimes causing gangrene of the mucous membrane. On the other hand the symptoms on the side of the nervous system are most grave, and death results in thirty-six to forty-eight hours.

2. Septic Diphtheria. General symptoms grave, with the local process very severe, extending to all parts of the throat, nose, and larynx, without always causing stenosis. At the third day the fever falls, the patient feels chilly, the skin is covered with a clammy sweat—and death results on the fifth or sixth day. Sometimes the false membrane is detached, and the patient recovers, but convalescence is always tedious and the various paralyses are very liable to supervene.

3. Pure Croup. General symptoms of moderate intensity, and local processes lightly spreading. The pseudo-membrane can be removed without leaving a bleeding service, and spontaneously clears itself

about the twelfth or fourteenth day. Sometimes this form becomes septic.

4. Light Diphtheria. General and local manifestations both light. Cure in from six to twelve days.

The cases of the latter classes almost always recover. Those of the second are curable under an energetic antiseptic treatment. Those of the first class are fatal.—*La Tribune Médicale*, April 28, 1892.

**Combemale, on the Micro-Organisms Observed in the Blood in Eclampsia.**—In a communication to the Medical Society of the Loire, Combemale called attention to this theory of Blane, who had found a microbe in the urine, and to the work of Faure, who has discovered a *micrococcus eclampsiae* in the placenta.

The micro-organisms which, by their presence and their secretions, cause eclamptic phenomena in pregnant women, have been found in the blood by Combemale. In four instances of eclampsia, cultures of the blood had shown the presence either of the staphylococcus aureus and albus together, or of the staphylococcus albus alone.

The author does not of course regard this limited number of experiments as conclusive, but reaffirms his belief in the microbic

theory of eclampsia. The diversity of the germs found does not militate against its acceptance. He regards eclampsia rather as a symptom than as a distinct disease.—*Gaz. des Hôp. de Toulouse*, April 30, 1892.

**Féré and Voisin on the Examination of Urine in Hysteria and Epilepsy.**—Féré has undertaken a new series of experiments, confirming, in his view, the idea that the amount of phosphates offers a very delicate test as to the differential diagnosis between these two nervous conditions.

Voisin, on the other hand, does not share the opinion. According to him :

1. The inversion of phosphates is rare, and very inconstant.

2. This inversion is seen in epilepsy following the attacks and during the periods between them.

3. It may occur in healthy subjects following the injection of certain substances.

4. Finally, he declares that the methods employed by observers to determine the presence and relative proportions of alkaline and earthy phosphates are not sufficiently accurate to be trustworthy. He believes that if there is any special characteristic of the urine of hysterical patients, it is to be found in the frequent presence of albuminuria within five hours after the attack. Peptones are also frequently present.

**Durbesson on Arterio-Venous Aneurism of the Internal Carotid Artery and Cavernous Sinus.**—The patient, a man, received several blows in the mouth from a revolver. Thereupon resulted nasal and buccal hemorrhage. In the left eye there was exophthalmos and a marked lessening of visual power ; in the right, considerable inflammation without exophthalmos. In the following months vision improved, the exophthalmos disappeared, and the man was enabled to re-enter the military service.

After a while exophthalmos began to develop. Soon pulsations were felt in the head which disturbed sleep. Sometimes shooting pains over the regions supplied by the fifth pair of nerves. For two months there was diplopia.

Eleven months after the injury the right eye was thrust downward and considerably forward from the orbit. The conjunctiva was injected and the superficial veins of the upper eyelid enlarged. The pulsations were especially noticed at the superior-internal angle of the orbit.

On auscultation there was heard a continuous souffle with a systolic re-enforcement, propagating itself toward the occipital region, and a thrill which disappeared on slight pressure.

Pressure on the angle of the orbit reduced the protrusion ; there, and pressure on the carotid completely abolished the auscultatory signs. The pupils were equal and reacted. Ophthalmoscopic examination of the right eye showed a reddening of the papilla, large and tortuous veins at the fundus, and a slight vascular pulsation. The left eye was practically normal.—*Gaz. des Hôp. de Toulouse*, April 30, 1892.

**Lediberder, on Cocaine in Uterine Injections.**—The writer often employs intra-uterine injections of tincture of iodine, and to lessen the pain caused thereby uses cocaine in the following manner :

The canula of the syringe is introduced to the fundus and slowly withdrawn, the piston being meanwhile gradually pushed home. Thus the cavity is filled with the solution (1, 2, or 3 per cent.), while the canula is held at the os a minute or two before the fluid is allowed to run off. This contact with the mucous membrane causes sufficiently strong anæsthesia, then the iodine is introduced in the usual way, and causes the patient no discomfort whatsoever.—*Gaz. des Hôpitaux*, April 26, 1892.

**Petit (L. H.) on Operative Surgery of the Biliary Passages.**—The great advance in this direction of surgical procedure has led to the introduction of many new surgical terms which Terrier has formulated as follows :

Cholecystolithotripsy, crushing of the gall-stones in the biliary passages.

Cholecystotomy, opening the gall-bladder and extracting the stone. The stones may be extracted from either the cystic or common duct, with or without crushing.

Cholecystostomy, opening of the bladder and fixing it to the skin, leaving a fistula.

Cholecystectomy, extirpation of the bladder.

Cholecystenterostomy, anastomosis between the bladder and bowel.

Choledocholithotripsy, crushing of the stone in the common duct.

Choledochotomy, section and extraction of stone from common duct.

Choledochostomy, communication of the common duct with the skin.

Choledoch-enterostomy, anastomosis between the common duct and the bowel.

Heptaticostomic, anastomosis between the hepatic duct and the skin opening.

Hepatostomie, anastomosis between the inner hepatic passages and the skin opening.

Catheterism of the biliary passages.

The original gives the indications of each operation of the group enumerated.—*L'Union Médicale*, April 26, 1891.

**Michaux on Laparotomy Necessitated by the Presence of a Large Mass of Iodoform Gauze Left in the Abdomen and Found in the Intestine.**—The writer reported this remarkable case before the Société de Chirurgie de Paris. His patient came under observation with the following history. She was twenty-four years of age, and had had a laparotomy previously performed; also, later, a vaginal hysterectomy. A return of the severe abdominal pains seemed to justify a new opening of the abdomen.

The intestines were agglutinated, and in detaching the adhesions the gut was torn open. There could then be seen in the bowel a large mass of iodoform gauze. In order to remove it fully a resection of 12 centim. of bowel was necessary. The Lembert suture was used in closing the gut. A fæcal fistula resulted. The case was reported five days after the operation, and the ultimate result is not given.—*La France Médicale*, April 1, 1892.

**Thiercelin on Croup in an Eleven-Months' old Child; Tracheotomy; Recovery.**—Five days before admission the child was taken with a cough, which rapidly grew metallic in character. Increasing dyspnoea with refusal to nurse and

diarrhoea soon placed it in a critical condition. On admission to hospital the tonsils and uvula were covered with false membrane. Submaxillary glands were enlarged. The skin was cold and facies ashy-pale. Nothing found in lungs. Tracheotomy was immediately done, the skin and tracheal incisions being made as small as possible. Every two hours the inner canula of the tube was changed and cleansed. To the throat frequent applications were made of a solution of salicylic acid in alcohol and glycerine. Under this treatment the child did well. The fæces cleared up on the fifth day, glandular swellings lessened. On the sixth day it was no longer necessary to change the inner canula, and the tube was removed on the eighth day. Recovery uneventful.—*La France Médicale*, April 22, 1892.

**Ménard on Delayed Consolidation of Fractured Leg; Treated by Chloride of Zinc Injections.**—A man, forty years old, with ankylosed knee, due to a tumor, sustained a V-shaped fracture of the leg seven centim. below the joint. A splint was applied and at the end of forty-seven days no union whatever had resulted. A second apparatus was worn one month, and a third and fourth two months, with a like result. Finally, in the fifth month after the accident, eight small injections of chloride of zinc solution (strength not given) were made on the site of fracture. Fifteen days after, the false point of motion had disappeared and union was complete at the end of a month.—*Gaz. des Hôpitaux*, April 26, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY JOHN RIDLON, M.D.

**Ballantyne (J. W.) on the Spinal Column in the Infant.**—One or two of the *general conclusions* to which a study of the spinal column in infancy leads us may now be mentioned:

1. The total length of the body of the infant at birth is about two and a half times that of the spine. This is due not so much to the lower limbs, which are relatively short, but to the head, which is large at this time of life.

2. In the case of premature infants (six or eight months' foetuses) the cervical and lumbar regions of the spine are practically

equal in length; but in well-developed, full-time infants the lumbar part of the vertebral column is longer than the cervical, although not so much longer as it is in adult life, when the lumbar spine is to the cervical as 3 to 2. (In the infant the proportion is approximately as 5 to 4.)

3. In the infant the spine is very flexible, and this flexibility is due not only to the imperfectly ossified condition of its segments, but also to the weak muscular action at this age.

4. There are no fixed curves in the infant's spine save that caused by the slight

projection of the sacral promontory ; those that are seen in frozen sections are due to the position of the body during freezing, and vary with the changes which the position may undergo.

5. Whilst there are no *fixed* curves in the spinal column in the infant, a general curvation of the spine above the sacral promontory usually exists (as it did also in foetal life), and this has an anterior concavity (kyphosis).

6. If the bones be unusually soft and the muscles weak (as in rickets), and also if the infant be encouraged to sit up at too early an age, this natural and temporary infantile kyphosis may become pathological and permanent. Under similar conditions other wrong curvatures of the spine may also be produced.

7. In the new-born infant the characters of the facets of the occipito-atlantoid articulations are not such as to permit of safe and extensive movements. — *Edinburgh Med. Jour.*, April, 1892.

#### Scudder (C. L.) on the Operative Treatment of Spastic Paralysis.—

A case is reported where all the shortened tissues were cut, with very great gain and no harm to the patient. The writer believes that the operation is justifiable inasmuch as drugs, electricity, mechanical treatment, and operations on the head have all failed. — *Boston Med. and Surg. Jour.*, March 31, 1892.

Morrow (P. A.) on some Differential Points in the Diagnosis of Syphilis and Tuberculosis, with Illustrative Cases.—After considering the differential diagnosis of skin and genital lesions, the author sums up the difference in bony lesions as follows :

1. Syphilis exhibits a marked predilection for the long bones ; its habitual localization is in the diaphysis and almost always at its terminal extremity. Tuberculosis is almost exclusively seated in the epiphyses, rarely affecting the shaft.

2. In syphilis there is a marked enlargement of the bone by more or less voluminous osseous tumors or hyperostoses, with little or no involvement of the soft parts ; in tuberculosis the tumefaction is due less to increase in size of the bone than to oedematous infiltration of the soft structures.

3. In syphilis there is little tendency to suppuration and necrosis ; in tuberculosis the pyogenic tendency is marked.

4. In syphilis osteocopic pains, with tendency to nocturnal exacerbation, is a pronounced feature ; in tuberculosis the pain is dull and heavy, not aggravated at night, sometimes there is entire absence of acute painful symptoms.

5. The osseous lesions of syphilis rarely react upon the general system, while those of tuberculosis often determine a marked impairment of the general health, grave complications, hectic fever, cachexia, etc.

Hutchinson (J., Jr.) on Syphilitic Joint Diseases.—The following divisions may be suggested :

1. Synovitis during the secondary stage. This usually occurs within a few months of infection, is of but short duration, is very amenable to mercurial treatment, and clears off leaving no trace behind. It is rarer and of far less importance than the other forms, which all occur during the tertiary stage.

2. Perisynovial gummata.

3. Arthritis due to osseous nodes or gummata in the neighborhood of the joint.

4. True chronic synovitis.

5. Syphilitic chondro-arthritis.

The diagnosis with arthritis deformans is as follows :

(1) The syphilitic disease may occur in one or more joints at a much earlier period than is usual with arthritis deformans, provided its subject be in the tertiary stage ; (2) the site of the erosions does not appear to be determined by intra-articular pressure ; (3) no eburnation of the exposed bone takes place, and osteophytic growths or "lipping" at the edge of the articular surface is absent ; and (4) the shape of the erosions, often reniform or crescentic, with well-rounded edges, differs somewhat from those seen in rheumatoid arthritis. In some of the specimens, at the site of erosion, a scar of fibrous tissue replaces the lost cartilage.

Any of the forms previously referred to may occur in the late stages of the inherited disease, but two others require notice which are practically confined to the latter.

1. Epiphysitis in young syphilitic infants not infrequently involves the joints, and suppuration may occur from this cause as well as sometimes independently of it. In the latter case it may be doubted whether the fact of the subject being syphilitic has much to do with the suppurative arthritis, which is really pyæmic in nature. 2. Chronic effusion into one or more joints,

especially the knees, is a fairly frequent occurrence in inherited syphilitic subjects during childhood or at about puberty. It is generally symmetrical, and occurs at the same time or soon after an attack of interstitial keratitis. It is, as a rule, almost painless, and is independent of the development of bony nodes or gummata near the joints. It may subside spontaneously in a month or two, or a condition of hydrops may persist for upwards of a year (in one remarkable case recorded by Fournier for many years). Antisyphilitic treatment has a marked effect in producing resolution, and no trace of the disease ultimately can be detected.—*Brit. Med. Four.*, Aug. 16, 1892.

**Willard (De F.) on Fractures and Injuries of the Spine in the Cervical Region.**—Four cases are reported. The first was a fracture of the third cervical vertebra, resulting from a fall of thirty feet. Reposition was made by strong traction, and the part was then put in a plaster-of-Paris collar. After the tenderness passed off, weight-and-pulley traction was made for six weeks, followed by a plaster collar for another six weeks. Recovery was complete.

The second case, cervical hemorrhage, resulted from diving eighteen feet into a pool two feet deep. There was loss of sensation and motion in both upper extremities, but none in the lower. He was treated by traction and countertraction apparatus, and recovered.

The third case, fracture of the odontoid process of the axis and dislocation of the atlas, resulted from a fall of twenty feet, the patient striking on his head. The patient was able to walk home, some squares distant. He died ninety-eight hours after the injury.

The fourth case, fracture of the laminae of the third, fourth, and fifth dorsal vertebrae resulted from a fall of forty feet, striking on the head on a curb. There was total loss of sensation and motion below the injury, but he was conscious. He died after ten hours. *St. Louis Courier of Med.*, March, 1892.

**Brackett (E. G.) on Reflexes in Hip Disease.**—Forty-seven cases of hip disease were examined and compared with twenty-one cases of spinal caries, with the result that in the hip cases the reflexes were uniformly increased, and in the majority of cases unequal in the two extremi-

ties, while in the spinal cases the reflexes were equal in all cases, and rarely increased.—*Boston Med. and Surg. Four.*, March 31, 1892.

**Wirt (Wm. E.) on Hip Disease—Operative Treatment in Old and Neglected Cases.**—The operative measures to be considered are: 1. Brisement Force, with or without myotomy, tenotomy, fasciotomy, etc.; 2. Osteoclasis; 3. Osteotomy.

Gant's operation is considered the best; it is based upon the anatomical reasoning that the resistance of the psoas and iliacus being set free, a return of the deformity is not to be expected; also, that by operating at a lower point than had formerly been done, the operator is more likely to strike healthy bone and less likely to re-light the old inflammation.

Sixteen cases are reported in detail.—*Columbus Med. Four.*, March, 1892.

**Gibney (V. P.) on the Complications and Sequelæ of Tuberculous Lesions Involving the Joints.**—Tubercular meningitis appears in about one and one half per cent. of all cases. Abscesses in about fifty per cent. Amyloid degeneration rarely appears where abscesses are opened and sinuses and cheesy foci scraped out.

The statistics of compression myelitis and paraplegia, and of deformities, are not given, and the plans of treatment advocated are such as are familiar to all.—*N. Y. Med. Record*, March 26, 1892.

**Cushing (H. W.) on a Case of the Phelps Operation for Talipes Equino-Varus: Results.**—The points of interest in this case were:

1. The completeness of the reduction of the deformity.
2. The small cicatrix—that is, small when the original gaping wound replaced by it is recalled.
3. The amount of pain immediately following the operation. Quite marked for twenty-four hours, then gradually diminishing, and finally ceasing at the end of the third day.
4. The tendency at present of the foot to assume a position of valgus apparently from a lack of support of its inner edge. This happens at times in cases treated by torsion and other operative methods, and can be controlled if it shows a tendency to increase. It may disappear as the cicatrix becomes firmer. It is now noticed

only when the foot has to support the weight of the body, as in standing, walking, or similar attitudes.—*Boston Med. and Surg. Jour.*, March 31, 1892.

**Thorndike (A.) on a Case of Double Congenital Club Foot in the Adult.**—A case is reported in which the deformity was very great, but which the writer was able to cure by tenotomy and forcible wrenching. It is believed that this measure should always be employed before risking open incision, osteotomy, or removal of bone.—*Boston Med. and Surg. Jour.*, March 31, 1892.

**Whitman (R.) on the Radical Cure of Confirmed Flat-Foot.**—The author believes that the breaking down of the arch is not the result of intrinsic weakness of muscles, or primary relaxation of liga-

ments, or congenital deformities of bone, or because there was some peculiar disease of cartilage, or primary muscular paralysis, atrophy, or spasm, or because the patient had worn high heels—according to the various theories advanced by writers on the subject,—but because the feet, originally sufficiently strong, had been placed at a serious disadvantage in the performance of their functions. The treatment consists in (1) forcible reduction and over-correction of the deformity; (2) temporary support to prevent relapse; (3) a proper shoe; (4) manipulation to stretch contracted and shortened tissues; (5) exercises to strengthen weakened muscles; and (6) re-education of the patient in the proper manner of walking and supporting weights.—*N. Y. Med. Jour.*, Feb. 27, 1892.

## REPORT ON DISEASES OF THE EYE AND EAR.

BY A. T. MUZZY, M.D.

**Wood (C. A.) on a Contribution to the Study of Concussion Cataract.**—Little advance has been made, though not through lack of study, in our knowledge of the causation of cataract since the days of Mackenzie. From the observation of two cases and the review of one by Becker the writer noticed the progress of opacity in eyes not subjected to direct violence, but to a sudden severe blow of the head or commotion of the body. The three standard causes by previous writers—(1) invisible rupture of the capsule, (2) separation of lens and capsule, and (3) interference with the nutrition of the lens—do not satisfy Dr. Wood; and he prefers to conjecture that the process gone through in the progress of a concussion cataract is similar to that artificial process performed by Förster, for ripening cataract, and that it is a disarrangement of the different refractive media.—*Annals Ophthal. and Otol.*, Kansas City, Jan., 1892.

**Zimmerman (C.) on Vaccine Blepharitis**—Few cases of this condition have been published, the writer mentions eight writers and nine articles. The case reported by the author, when first seen, aroused the suspicion of the cause—that is, contact with a vaccination sore. At the outer canthus of the right eye were two ulcerating patches slightly oedematous. Careful persistent inquiry substantiated the connection, the blepharitis patient having

a bed-fellow who had recently been vaccinated. Reviewing the history of previous cases, in none of them could it be proved that any lesion or abrasion of the ciliary margin pre-existed! in most cases the ulcer formed on the lower lid followed by one at the corresponding point on the upper lid. The accompanying conjunctivitis was of diphtheritic appearance. In the writer's case there was considerable swelling of the pre-auricular and submaxillary glands and tonsils, with fever and general prostration, the condition also spreading to the other eye. The only ocular complication noted has been in severe cases inflammation of the cornea.—*Arch. Ophthal.*, vol. xxii., No. 2, 1892.

**Smith (S. MacCuen) on Traumatic Hemorrhage of the Tympanum Causing Deafness with Subsequent Restoration of Hearing, with Report of Cases.**—*Case 1*, was that of a wealthy gentleman suffering from the usual symptoms of Ménière's disease: dizziness, vertigo, tinnitus, and the consequent anxiety and exhaustion, which had been produced two years before by violence over the mastoid. Twelve months after the accident the mastoid was opened with the aim of relieving internal pressure if such should be found. This did no good. Examination showed highly sensitive and inflamed osseous meatus membrana tympani inflamed and thickened, and posterior

segment bulging! Eustachian tube and adjacent parts swollen, the tube being occluded; aerial conduction of sound wholly lost, bone conduction quite good over mastoid. The first step in the writer's treatment of this case was a free incision, under cocaine, of the drum, giving exit to what proved an old blood clot. This immediately relieved the pain and vertigo, as well as the accentuated tinnitus, rotatory sensations, and staggering movements, allowing him to stand once more with perfect ease, and inducing an overpowering desire for sleep. Hearing was the only point unimproved. Subsequent irrigation of Eustachian tube and drum and Politzerization gave  $\frac{1}{2}$  hearing. With removal of these symptoms all exhaustion and cachexia disappeared.

**Case 2.** A boxer had received a heavy blow over the mastoid the night before being seen, producing symptoms similar to Case 1, though not as severe. There was no bulging of the drum, though it was inflamed and painful. Under cocaine the drum was incised and a blood clot syringed out, giving immediate relief to all the symptoms. Hearing was regained in sixteen days. The writer believes that, as incision of the drum seldom if ever is productive of ill effects, this procedure should be an imperative duty in all doubtful cases not promptly yielding to other methods. On this principle the author has had good success in a number of cases where deafness was directly or indirectly due to traumatism.—*Annals Ophthal. and Otol.*, Kansas City, Jan., 1892.

**Risley (S. D.) on Hyoscyamine as a Mydriatic.**—The superiority of the solution of the white salt of hyoscyamine as a mydriatic over the other solanaceæ is so great that the writer uses it for all refractive work except in selected cases. The reason why many are disappointed in its use is a lack of care in selection of the specimens of the salt. In all cases where its use was followed by smarting and too long persistence of mydriasis, it was found, where the history of manufacture could be followed, that it had been made from the amorphous semi-fluid salt, and not from the white, dry crystals. Hyoscyamine is isomeric with atropine and duboisine, and so is very closely related to the others. Indeed W. Will has shown that under certain conditions *only* hyoscyamine can be extracted from belladonna, and, then turned

into atropine by simply heating to the melting point, treating with an alkali, or heat in the presence of hydrochloric acid. One grain of a ten per cent. solution of hyoscyamine was completely converted into atropine by one drop of soda solution in two hours. The writer concludes: *first*, that for ophthalmological purposes only the pure crystals of hyoscyamine skillfully prepared should be used; *second*, that in dispensing it the solution should be strictly neutral, that only moderate degrees of heat, if any, should be used, and when filtered this should be done through neutral paper.—(*Annals Ophthal. and Otol.*, Kan. City., Jan. 1892).

**Chisholm (J. J.) on the Japanese Hot Box the Best Means of Applying Dry Heat for the Relief of Eye Inflammation.**—The box is a medical device found in every Japanese home. In size and appearance it is a little smaller than the hand in length, breadth, and thickness, and is curved on the broad surface. Though a little large for the eye this difficulty is overcome by enveloping the box in a handkerchief, which also serves to secure it to the head; and the orbital depression may be filled with cotton to transfer more directly the heat generated, about 120° F., to the globe. The charcoal cartridge lasts about three hours. This device saves the fingers of attendants, and is more even and continuous than the many other forms of applying heat. In many cases the relief of pain is magical, even proving successful in eyes of old people lost through glaucoma, where the other means, iridectomy, etc., had been already used. These boxes may be secured at all Japanese stores and at some drug stores. (*Annals Ophthal. and Otol.*, Kan. City, Jan., 1892).

**Jackson (Edward) on Cocaine Anæsthesia for Enucleation of the Eye.**—In using cocaine for enucleation the distinction must be made as to whether the eye to be operated upon is or is not hyperæmic. In the non-hyperæmic condition cocaine has been found by the writer very satisfactory. Failure to make this distinction gave very unfavorable results when first tried. The method of its use is instillation for fifteen or twenty minutes before operation; and while it is usual to bathe the cut tissues during the operation, the main reliance is this previous use. The writer thinks the main point is care in section of the tendons, as it is at this juncture



when tension is liable to be unnecessarily made, that pain is most decided. Enucleation of a non-inflamed eye is not as painful as tenotomy. (*Annals Ophth. and Otol.*, Kan. City, Jan., 1892.)

**Knapp (H.) on Glaucoma after Dissection of Secondary Cataract and its Successful Treatment by Iridectomy.**—Glaucoma after the simple or combined operation for cataract, and before any after-operation, has been described by others, but to the writer's knowledge never in his practice. The occurrence of glaucoma after the secondary cataract operation has been rarely recorded. The writer notes the gradual increase in its occurrence in this later connection among his own cases, but also found that iridectomy promptly cured all on whom it was performed. Ten cases are described as occurring in six years, making about 1 % in Dr. Knapp's experience. Three other cases showed transient irritation (cyclitis) and plus tension, but were permanently relieved by use of eserine or pilocarpine without operation. Having of late years

divided the capsule in the shape of a cross +, Dr. Knapp has abandoned it for the older T-shaped incision, although admitting the advantage of better absorption from the cross cut. Some of the writer's conclusions are the following. Some of these traumatic glaucomas recover without operation; some do not. Iridectomy has always proved successful. In all the iridectomies performed normal vitreous, occupying more or less completely the anterior chamber, flowed out, but had no ill-effect on the result. All of these traumatic secondary glaucomas showed pain, swelling of the lids and conjunctiva, dulness of cornea and pupil, bulging of periphery of iris, with crater-shaped pupil, increase of tension, impairment of sight, general disturbance, even vomiting. This 1 % of glaucoma does not deter the writer from preferring simple extraction of cataract to the combined form; for this method, with occasional modifications, continues to give fewer failures and more permanently good results than any other.—*Arch. Ophthal.*, vol. xxi., No. 2, 1892.

## REPORT ON GYNÆCOLOGY.

BY W. EVELYN PORTER, M.D.

**Shepherd (Geo. R.) on the Treatment of Minor Lacerations of the Female Perineum.**—An extended experience in the practice of obstetrics has convinced the author that there are some points pertaining to this subject which are not sufficiently appreciated by practitioners in general, or, at least, are not observed in the discharge of their duties as accoucheur. Complete lacerations through the sphincter are almost invariably attended to promptly and properly by physicians at the present day; but, unfortunately, the smaller tears are often disregarded, the patient being told that little or no danger has been done, relying wholly upon the efforts of nature for repair. Occasionally a bandage may be placed about the knees, but, as a rule, nothing whatever is done, the patient getting up and resuming her duties unaware of the actual conditions until warned of them by the suffering resulting later on in life.

Attention is called therefore to the need of greater care in the treatment of minor lacerations.

The writer is constantly consulted by patients suffering from procidentia uteri,

where the cause is due to a slight laceration of the perineum, the tissues forming the perineal body having undergone a process of atrophy. Considering this a likely occurrence in any case, he holds that no laceration, however slight, should be allowed to pass without surgical treatment; in other words, "whenever, after confinement, the perineum is found to measure less than one and one half inches between the anal and vaginal orifices, surgical treatment is demanded."

Lacerations through the mucous surface should be looked for, as they often exist without any outward evidences of tear, and when found an operation for their repair should be promptly done. To ascertain the exact conditions, after the cessation of the lochia and before the patient resumes her ordinary duties, one should always make an ocular as well as a digital examination of the organs of generation. Were these precautions and measures always enforced there would be fewer invalid mothers in the land, larger families in our households, and the manufacture of pessaries would become a lost art.

The details of treatment vary in different cases according to the time at which it is commenced. Immediate operation is advised in the majority of cases where there is an external wound. If the patient is under the influence of chloroform, silver wire sutures should be introduced at once, a needle with round point being used in preference to one with a cutting edge. Where the patient has come out from the influence of the anæsthetic and it is found desirable to have the operation performed rapidly and with as little discomfort as possible, automatic sutures similar to serre-fines may be used. Messrs. Tiemann & Co., of 107 Park Row, New York, have made various sizes of these sutures from patterns designed by the author.

They consist of a piece of steel wire bent in the form of a clasp, having sharp points varying in length from one fourth to three fourths of an inch. These are held open by a handle devised for the purpose, and can be made to penetrate the tissues to the desired distance, and then, as the handle is removed, the spring holds the parts firmly, exactly as a silver-wire suture would do. When properly applied the parts are brought into perfect apposition and retained there without any discomfort. In introducing them, the forefinger of the left hand should be passed into the rectum and one side of the perineum held between the thumb and finger, one arm of the needle being passed completely through the tissues on that side, and then the opposite side should be held and the opposite arm introduced in the same way. As the handle is withdrawn the arms of the needle spring together, approximating the two surfaces. As many needles as necessary may be introduced in this manner without removing the finger from the rectum, and the entire laceration firmly secured without occupying more than a moment's time and with but slight pain to the patient. Results by this method compare favorably with those where the suture is employed, but it is important to see that the needle is completely through the tissues in order that it may furnish the needed support throughout the length of the wound.

In secondary operations for small lacerations the automatic needles act admirably, and in cases where the laceration is intravaginal they may also be used, being passed through the skin of the perineum in the same manner as though it were a

complete laceration, the vaginal tissue being held as firmly by them as though introduced from the inside.

The use of serre-fines was found to be unsuccessful because they penetrated the skin only, giving no support to the underlying tissues, which consequently failed to unite. These needles, on the other hand, completely transfix the perineum and furnish support identical with that made by a silver-wire suture.—*Trans. Am. Ass. of Obst. and Gyn.*, 1891.

**Currier (Andrew F.) on Amputation of the Vaginal Portion of the Cervix Uteri in Cases of Suspected Carcinoma.**—Provisional amputation is suggested in suspicious cases of disease of the cervix, for the purpose of completing an unsatisfactory diagnosis, at the same time obviating the danger of possible removal of a non-malignant uterus. The examination of scrapings and small sections from the cervix is often inconclusive, and the removal of larger pieces so mutilate the organ as to offer no advantage over amputation. It is in harmony with the author's views, moreover, in regard to early consultation in cases of persistent erosion or ulceration, and cases of metrorrhagia which cannot be satisfactorily accounted for by the general practitioner.

When malignant disease clearly exists hysterectomy should be resorted to, or curetting and cauterization as a palliative measure, where hysterectomy is inadmissible. The conditions rendering the diagnosis difficult in these cases are:

(1) Endometritis with or without hemorrhage from the anterior of the uterus.

(2) Hyperplasia, with or without fissure of the os, and endometritis.

(3) Erosions, ulcers, and glandular disease.

(1) Endometritis, when existing in its more severe forms with discharge of pus, blood, or mucus, demands curettement and the careful examination of scrapings. This operation failing to afford relief from symptoms, and the microscopical examination proving unsatisfactory, amputation should be resorted to.

(2) Hyperplasia of the vaginal portion may simulate malignant infiltration, and may occur in either parous or nulliparous women. The unusual size and density of the uterus, especially if accompanied by a fissure of the os and eversion of the endometrium, strongly suggests malignancy.

nancy. The dense and poorly nourished tissues would not be likely to heal kindly should trachelorrhaphy be performed, so on this account and also on account of the relative amount of tissue obtained for examination, amputation should be done.

(3) Erosions, ulcers, and glandular disease of the cervix are often mistaken for malignant diseases. Erosions should disappear after the removal, by curettement, of the endometritis or the morbid conditions causing them. This failing, the vaginal portion should be amputated.

Aside from malignant ulcers we may have traumatic, syphilitic, chancroidal, rodent, or papillomatous conditions to deal with, some of which are ultimately likely to become malignant. Other means failing in these cases also, amputation is indicated.

Glandular disease, as shown by Ruge and Veit, demands the greatest watchfulness.

Astringent and caustic applications should be used with care as they may arouse incipient malignant disease to increased activity.

Amputation of the vaginal portion is suggested in preference to high amputation of Schröder and Boker, because of its superior importance as a means of diagnosis, and the lesser degree of injury which it inflicts upon the uterus if malignant disease is not present.

It may prove equally curative in the early cases of malignancy, and may be performed occasionally when pregnancy coexists. The usual details should be followed out in the performance of the operation.—*Annals of Gyn. and Pæd.*, April, 1892.

**Beattie (T. J.) on Metrorrhagia Occurring about the Menopause.**—For years past there has existed the belief, among many physicians and the laity at large, that profuse uterine hemorrhages are a normal accompaniment of the climacteric period. A review of the changes which the uterus undergoes from girlhood to advanced age will serve to explain the real nature and possible causes of their occurrence. When a girl reaches the age of thirteen or fourteen years, her physical development is most rapid, the sexual organs developing with especial rapidity. There is experienced a feeling of weight in the pelvis and general indisposition, followed by the onset of the menstrual flow.

This flow continues at regular intervals, unless interrupted by pregnancy or some pathological condition, up to the age of forty-five or forty-six years. A retrograde change then follows, the uterus, ovaries, and Fallopian tubes becoming atrophied and assuming much the same appearance which they had prior to the period of sexual activity. The periodical flow becomes scanty and irregular until it finally ceases. Unfortunately, however, we are seldom able to observe this normal physiological course of events, comparatively few avoiding the disorders of menstruation due to a more or less diseased condition of the uterus or appendages.

Text-books attribute the cause of profuse hemorrhages occurring at the menopause to a want of resistance to the blood pressure, senile rigidity, softening and relaxation of the uterine tissues, or vasomotor disturbances. Other causes, however, will be found in many cases which can be relieved by proper measures, and it is the object of this paper to urge the more careful examination of women troubled in this way in order that the exact cause may be ascertained and proper treatment afforded.

Women thus afflicted are usually multiparæ, and frequently the cause of their condition may be traced to previous confinements. Subinvolution resulting from a laceration of cervix and perineum, engorgement from uterine inflammation, or obstruction of the circulation, endometritis with the consequent thickened and varicose condition of the endometrium, are among the possible causes of profuse uterine hemorrhage.

The writer records the case of a woman forty-eight years of age, mother of seven children, suffering from frequent uterine hemorrhages due to fungous endometritis, where the vaginal tampon failed to check the hemorrhage. He succeeded in checking it by injecting about two drachms of Monsel's solution directly into the uterine cavity and then tamponing. Subsequently he cured her by removing the fungoid growths by curettement, and stimulating intra-uterine applications, together with general tonic and hygienic measures.

Observation of a number of women suffering from metrorrhagia about the time of the menopause leads him to attribute the cause, in the majority of cases, to laceration of the cervix and unsymmetrical contraction of the uterus during the

retrograde changes consequent upon this period. If much cicatricial tissue exists, the cervix may become closed or very small in size, while the body is still large and the glands in the endometrium active. This is apt to result in the accumulation of fluid, which acts as an irritant and keeps the organ in a constant state of congestion. In some instances no distinct pathological conditions are found, there existing principally a peculiar susceptibility to hemorrhagic discharges. In these women, where an inherited tendency seems to exist, there is a highly vascular and relaxed condition of the uterus, which is rendered worse by any interference with the pelvic circulation as by fæcal accumulations.

Growths in or near the uterus, such as interstitial fibroma, a polypus, or carcinoma, form a large and important class of conditions causing uterine hemorrhage. The importance of early diagnosis in this class, especially the cases of malignant diseases, cannot be overestimated, for when detected in its incipency and entirely removed the prognosis is favorable. In every case of metrorrhagia and menorrhagia therefore occurring at the decline of menstrual life a careful investigation into the real cause should be made in order that proper treatment may be employed. — *Kansas City Med. Record*, April, 1892.

**Simpson (A. R.) on the Marriage Question from the Standpoint of Gynæcology.**—The marriage question is one which of late has been fully treated of in all kinds of newspapers and magazines, by writers of all varieties of mind. When the laity are writing various ideas derived from sources that range from supernatural revelations to animal instincts, the trained physician will be expected to express the opinion that will correspond to the result of scientific observation and philosophical reflection. This may especially be expected of the gynæcologist, for in the process of reproduction the rôle of the female is higher than the rôle of the male, and it belongs to him to consider under what conditions she may fulfil the functions with greatest safety to herself and with best hope of producing numerous and healthy offsprings.

Although the gratification of the sexual appetite is not a necessity for the individual, statistics show that the condition of celibacy is not favorable to health, a fact which is admirably shown in Bertil-

lon's article on "Marriage" in the *Dictionnaire Encyclopédique des Sciences Médicales*. The general mortality is marked higher among bachelors and widowers than among husbands, the same proportion holding good, though less striking, among the female portion of the population. The exact figures contained in Bertillon's extended tables are so closely confirmatory of the general results that it will suffice to look at the French table of mortality.

*Proportion of Deaths per 1,000 at Different Ages of the Unmarried, Married, and Widowed.*

Ages.	Bachelors.	Husbands.	Widowers.	Spinsters.	Wives.	Widows.
15-20	6.89	51.32	774.	7.53	11.87	112.31
20-25	12.88	8.92	49.6	8.32	9.92	23.62
25-30	10.17	6.24	21.84	9.02	8.98	16.0
30-35	11.52	6.82	19.17	9.87	9.36	15.03
35-40	13.15	7.52	17.50	10.87	9.29	12.73
40-45	16.62	9.55	18.89	13.28	10.14	13.30
45-50	19.60	11.47	22.2	15.71	10.69	15.20
50-55	25.8	15.61	26.8	20.97	14.21	18.71
55-60	31.1	21.5	34.17	26.90	19.29	24.47
60-65	45.92	32.6	47.5	40.52	30.75	37.07
65-70	58.5	44.8	62.97	58.3	45.2	53.5
70-75	85.1	71.5	95.4	85.5	72.67	86.1
75-80	123.	114.5	143.9	140.5	109.4	126.7
80-85	202.7	182.8	221.8	222.5	172.5	198.
85-90	268.4	228.6	263.05	305.	205.1	264.
90-95	282.	279.	310.	314.1	256.3	308.
95-	480.	357.	385.	387.7	416.	224.

Excluding the deaths in the first quinquennium where the individuals were under twenty years, we observe that the mortality of the central group—the married people—is marked by less than the group on either side.

Statistics show therefore that the conjugal association, provided it is not prematurely entered upon, is salutary to both sexes, though it is the husband who benefits most from the union. The dangers of childbearing neutralize in a measure its benefits to the female during the child-bearing period. The comparison of the vitality of married women and widows with that of spinsters beyond the age of fifty years, however, is significant. In France the mothers of families, wives or widows, at every period of their existence after the age of twenty-five, pay a smaller tribute to death than the spinsters of corresponding age.

Passing on to the consideration of the "physiology of marriage" we must examine the effects of different methods (1) in respect to fertility and (2) in respect to the offspring.

*Communal Marriage.*

Of all the methods that have been proposed for the propagation of the race, this promiscuous union of the sexes is the worst. Its prevalence in past ages has been denied by some, although even at the present something very like communality prevails among the North American Indians and South Sea Islanders, where it is seen to eventuate in sterilization of the women, and death or destruction of the infants. The same facts furthermore are observed among prostitutes as a class.

*Polyandry.*

Polyandry is, perhaps, equally deleterious in its effects. In Thibet and among the Esquimaux, where it is occasionally seen, the co-associates are usually brothers, the eldest of whom chooses a wife for the party. This kind of union is obviously incompatible with fertility, and when a mother happens to die in childbed or soon after, it is the custom among polyandrions to bury the child with the mother.

*Polygny.*

Polygamy, or rather polygny, although unphysiological, is a decided advance over polyandry. The women of the seraglio are not, as a rule, fertile, for although the master may be the father of many children, each individual wife has comparatively few, making the birth rate relatively low. It is also noted that among polygynous populations the infantile mortality is greater than when monogamy prevails.

*Monogamy.*

Bertillon defines marriage fully as "a synallagmatic (mutually consenting) and authentic (openly acknowledged) contract to constitute a family, by which the pair, besides the sexual relations, assure each other of community of life with a view of mutually providing society and material and moral support, and of securing the proper upbringing of their children." By such a union the race is maintained and multiplied, the offspring being not only more numerous but healthier.

*Dangers of Infraction of Law.*

Among the risks to a woman yielding herself to a man who has not openly declared his readiness to assume marital responsibility, may be mentioned the following:

1. She may become tainted with *syphilis*,

which fortunately is a comparatively rare occurrence in the married state.

2. She may contract a *gonorrhœa*, which in turn may lead to some of the most painful and protracted diseases, and render her hopelessly sterile.

3. She may become *pregnant*, there being no time at which she can be sure that conception will not follow insemination. In her unsheltered solitary state, the ordinary dangers of pregnancy and parturition and the puerperium are all aggravated, and as it is clearly shown by statistics the dangers to her infant are correspondingly great.

To have determined the kind of marriage relation that is most conducive to propagation, does not however exhaust the duty of the gynæcologist, who is likely to be consulted as to the best conditions under which the relation may be entered upon. He has to consider further, *e.g.*, the question of:

1. *The marriageable age.* A careful study of various statistics in a general way shows that ill effects are likely to result for the father, mother, and child, where the state is entered into before the age of twenty years. For the man, even twenty-three to twenty-five years may be considered a better age. In such a matter we necessarily speak of averages, as in the mental and corporeal development of both men and women we find great diversities in the dates of their completion.

2. *Physical bars to marriage.* In connection with this question we have to consider among other things the function of menstruation. Regularity of menstruation may usually be taken as a sign of fitness for procreation, though it may exist with morbid conditions, such as deformities of the pelvis. The irregularity or absence of the flow, on the other hand, may indicate the presence of some condition that will inevitably cause an infertile union, such as congenital atresia vaginæ, or infantile or otherwise imperfectly developed uterus. Besides malformations of the pelvis and generative apparatus, there are other organic defects or constitutional tendencies that ought to make our patients pause before they encounter the risk of reproduction. Among others may be mentioned heart disease, insanity, epilepsy, inebriety, idiocy, deaf-mutism; dangerous diatheses, such as the cancerous, tuberculous, syphilitic, and rheumatic.

3. *Regulated marital intercourse.* The

gynæcologist has to consider not only what may be the proper age for entrance on the reproductive career, and the physical conditions local or constitutional that may be an embarrassment or even an actual bar to the process, but also he has to be ready to indicate the conditions under which it may be healthily carried out. In doing this he should urge the necessity of an ethical rather than of a mechanical prudence after marriage, of a temperance recognized to be as binding on husband and wife, as chastity on the unmarried. When we consider the inevitable consequences of intemperance, even if the dangers of too large families be avoided, and the possibility of exaggerated sexuality becoming cumulative by inheritance, we must appreciate that the ideal to be sought after is not merely a controlled rate of increase, but regulated lives.—*The Med. Press and Circular*, March 30, 1892.

**Maddren (Wm.) on a Few Remarks upon the Brandt System of Treatment of the Diseases of Women.**—In reviewing the subject as given by Brandt in his *Treatment of the Diseases of Women*, it is evident that he sees only with the eye of a man with one over-mastering idea. The following list embraces some of the ailments which he claims to have cured by his method: Prolapse of the uterus; prolapse of the vagina; prolapse of the rectum, either partial, complete, acute, or chronic; incontinence of urine following labor, floating kidney, displacement of the uterus, abnormally large or small uterus, adhesions to the pelvic wall, adhesions to the rectum, cervical catarrh and ulceration, menorrhagia, swelling or enlargement of the ovaries, oöphoritis and peri-oöphoritis, dislocated or adherent ovaries, salpingitis, hydrosalpinx, displaced or adherent Fallopian tubes, swelling and enlargement of the broad and other ligaments, inflammations and exudations in the pelvis of various kinds.

The Brandt method may be described as a course of daily gymnastics, general and local. The general treatment consists of: chest movements, movements of the limbs—the upper and lower, alternately; movements of the trunk muscles, movements of the inner part of the abdomen—the pelvis; movements of the head and neck, movements of the lower limbs, and, finally, a respiratory movement. The local or pelvic treatment consists of: lifting the uterus, which has been grasped

through the abdominal walls, bimanual manipulation, stretching of adhesions or shortened parts, double pressure or massage, vibratory pressure, circular movements, and lumbo-sacral percussion.

In manipulating, it is his rule to endeavor to draw the blood away from the pelvis by stroking movements, unless the patient suffers from scanty menstruation or amenorrhœa; and he uses stroking movements toward the part where the nervous vascular activity is relatively less vigorous.

He sums up his method of treatment in these words: "Taught by long experience that women affected by genital diseases almost always suffer also from other disturbances, I would not be willing to dispense with auxiliary remedies, general movements, and hydropathic treatment."

Some of the measures suggested and practised by Brandt are novel, and, it would seem, in many instances hazardous, as for example: stroking and massage for hydrosalpinx, with the intent of emptying the tubes into the uterus or possibly into the abdominal cavity; general and local treatment during menstruation; massage for enlarged and painful ovaries; and yet, he claims excellent results, and states that he has lost no patient by his treatment. Such procedures involve the ability to make a very fine diagnosis, and make one think that the contents of the distended Fallopian tubes must be much less harmful than has been generally supposed.

Before reading of the Brandt system, the author found that he could relieve pain and improve the functions in certain cases, by lifting a displaced and adherent uterus, thus stretching contracted ligaments and adhesions; but he also found that much harm could be done where acute inflammatory conditions existed. He is of the opinion that the best results are to be looked for in misplaced and adherent uteri, with resulting pains, disturbances of function, or sterility.

Brandt's views on the subject may be best given in his own words:

"As a matter of course, local treatment of the pelvis should be instituted only when pain or other symptoms are present; sterility forms the only exception to this rule.

"In many cases the true interests of the patients are not subserved by discontinuing the treatment as soon as the pains cease. It is better to continue the treatment a little longer, partly in order to obtain a possible

improved position of the uterus, partly in order to be certain that the improvement is permanent.

"It is often found that patients who suffer from uterine displacements, attended with more or less severe pelvic disturbances, are freed from the latter after a short period of treatment, although the position of the uterus remains abnormal. The treatment might then be regarded as successful if the patients felt permanently well, but it cannot be denied that there is a tendency to relapse in such cases. For this reason I am rarely satisfied with the disappearance of the symptoms, but always attempt to restore the organ to its normal position. This is, by no means, always possible."

He says, I think erroneously: "It is to be assumed that electricity is useless, inasmuch as the method has not met with general approval." He also says: "In my opinion the only rational treatment consists in relieving retractions, congestions, exudations, etc., by means of massage, stretching and pressure movements, and, on the other hand, in attempting to stimulate the paralyzed and elongated ligaments to contraction by means of lifting movements."—*Brooklyn Med. Journal*, April, 1892.

**McKee (E. S.) on Habitual Abortion.**—It is a common experience among obstetricians that some women are unable to carry their offspring to full term, being so high-strung and hyperæsthetic that the slightest trifle is sufficient to induce an abortion. Thomas attributes the cause to a hyperæsthetic condition of the uterine system of nerves, while Carpenter attributes it rather to a special irritability of the uterine fibres. The sphincter of the uterus seems in some cases to be weaker, and the undue irritability of the uterus determines the premature appearance of contractions, the cervix yields, the membranes rupture, and miscarriage results without other explanation than this excessive irritability of the uterine fibres. Routh suggests paternal albuminuria as a cause of recurrent abortion, while cardiac incompetency in the mother was believed to be an important reason by Dr. Handfield Jones. A failing left ventricle leads to sluggish circulation in the uterus, and, as a result of this, extravasation of blood between the membranes and the muscular walls of the uterus. In many cases good results follow the administration of cardiac stimulants. Chronic lead poisoning, espe-

cially in the mother, is found by Schuhl to be a frequent cause of abortion. Rest in bed during the days corresponding to the normal menstrual epochs is a most rational and successful means of treatment, some even urging confinement to bed during the greater part or entire period of gestation.

Chlorate of potassium is a valuable remedy in these cases, its action probably depending upon its oxygenating properties. It is given in doses of from 15 grs. to 30 grs. three or four times daily. Numerous cases are recorded by various authors of the beneficial effects of the drug, especially in cases of anæmia and cases of fatty degeneration of the placenta, the writer reporting an interesting case of cure after frequent abortions from the latter cause.

Syphilis does not play so great a part in fatty degeneration of the placenta as is supposed by some, it being due in all probability in the majority of cases to a faulty nutrition, as with fatty degeneration elsewhere. Whatever may be the *modus operandi* of chlorate of potassium in the cases, whether it acts as a tonic or is decomposed in the blood, thus directly furnishing an increased supply of oxygen to the foetus through the placental tufts, or whether it puts the blood in such a state that it can carry an increased quantity of oxygen, is a matter of speculation. Nevertheless we have the clinical fact that it has a direct beneficial effect in properly selected cases.—*Am. Four. Obst.*, June, 1892.

**Martin (J. N.) on Rectal Derangement in Women.**—Many causes that conspire to produce derangement in the rectum of the female do not exist in the male. We find therefore more women suffering from congestion, hemorrhoids, prolapse of bowel, paresis, constipation, and their results, in the way of pain in the back, pelvis, and head, and mental depression that so frequently accompanies these conditions.

Frequently women are treated for months at a time for supposed uterine or ovarian trouble, while in reality the difficulty is entirely in the rectum, and can be relieved by regulation of the bowels, removing the hemorrhoids, treating a fissure of the anus, stretching the sphincter, or performing a posterior colporrhaphy to strengthen the bowel, as conditions may indicate.

Women are apt to be irregular in their habits as regards evacuation of the bowels, and as a result are particularly disposed to constipation. Constipation, moreover, means not simply a deficient elimination of fecal matter, but much more, being the forerunner of a long train of evils.

Straining at stool often leads to derangement of pelvic organs in the way of displacements, and if a displacement is once started it is easily made worse by such efforts. Among the other conditions resulting from constipation may be mentioned hemorrhoids, fissure, prolapse, and paresis of the bowel and disturbances of the pelvic circulation. When congestion of the rectum is once established it is likely to be productive of a variety of evils, which in turn disturb the entire nervous system. On the other hand rectal de-

rangements often result from and are dependent upon displacements of the uterus and appendages. It is a common experience to meet with cases in which an irritable bowel is caused by an enlarged retro-displaced uterus resting heavily upon the rectum, relief being experienced at once upon replacing the uterus. In attempting to remedy this condition of constipation one should be explicit in giving advice, avoiding all vague terms, and having in mind each of the following points:

1. Regularity in going to stool.
2. Regulation of diet (food and drinks).
3. Abdominal massage.
4. Tonic laxatives in small doses three or four times daily, as, for example, the combination of nux vomica and fluid extract of cascara.—*Am. Gyn. Jour.*, March, 1892.

## REPORT ON SURGERY.

BY CHARLES A. POWERS, M.D.

**Steierlin (R.) on Extirpation of the Thyroid Gland in Basedow's Disease.**—S. avers that of 29 known cases in which this measure has been carried out marked improvements have followed in 22. He does not explain how it is of value.—*Bruns, Beiträge, etc.*, Bd. viii.

**Ritsik (A.) on Congenital Sacral Tumors.**—R. describes in detail, with complete microscopical report and plates, a case in which a tumor, the size of a baby's head, was removed from the sacral region of a child of twelve years. Within this mass was found a small cavity in which were growing short thick hairs. The origin of such tumors R. believes attributable to imperfect foetal developments.—*Bruns, Beiträge, etc.*, Bd. viii.

**Monday (G.) on Symmetrical Primary Carcinoma.**—M. thinks it questionable whether the synchronous appearance of symmetrical carcinoma is truly to be ascribed to an individual starting-point for each, as the disease has so many ways of spreading. He details two cases, neither of which possesses especial interest.—*Beiträge zur klin. Chir.*, Bd. viii.

**Camponotto on Total Laryngectomy.**—C. exhibited a man whose larynx he had completely removed three years before. No trace of recurrence; perfect comfort.—*Riforma Med.*, 1892. Ref. in *Central. für Chir.*, 1892, No. 13.

**Hamburger (O.) on Contact Infection in Epithelioma.**—Author has gathered from literature six cases. To these he adds the following. A fifty-year-old woman had suffered for two years with an epithelioma the size of a hen's egg on the left labium minus. Two years previous to her coming under observation a small ulceration had developed on the opposite lip, at a point at which the labia were constantly in contact. Extirpation; microscopically verified.—Ref. in *Central. für Chir.*, 1892, No. 14.

**Habs (R.) on a Report on 200 Herniotomies.**—A statistical paper detailing histories of the cases of herniotomy in Hagedorn's Clinic for the seven and one half years ending with July, 1890. Of the entire number, 30 were non-incarcerated, 13 reducible, 17 irreducible—all of which recovered. The remaining 170 were incarcerated, of these 29—17 per cent. of the latter number—being fatal.

In all cases in which no contra-indication existed, an attempt at radical cure was made after the ordinary manner of Czerny, or this slightly modified. In general the wound was sutured, drains being omitted. In a few cases, however, tamponade was used, this with the intention of preventing collection of secretion.

Hagedorn seems to have been somewhat conservative in recommending operation in



non-incarcerated cases, reserving it for those in which the hernia was of large size, painful, or in patients who had already suffered attacks of incarceration.

Childhood was not looked upon as a contra-indication, the operation being carried out four times on children who presented very large herniæ. Of the 170 incarcerated cases, 66 were inguinal, 96 crural, 1 obturator, 3 umbilical, and 4 ventral. Among the inguinal cases worthy of special note may be mentioned two in which the processus vermiformis was found to be adherent to the sac. Again, he noted among the femoral herniæ one case in which a diverticulum of the urinary bladder was found behind the sac, as well as one in which the right Fallopian tube formed part of the contents of the hernia.

Primary section of intestine and circular enterorrhaphy were adopted in sixteen cases with nine deaths. Indication therefore was found in necrosis of such area that it could not be closed by Lembert's suture. Continuous suture of the mucosa was followed by Lembert's suture of the serosa, the latter also continuous. Catgut was used in all cases, quick absorption not being feared, since good union was to be expected at the end of twenty-four hours.

Although the individual histories of the cases narrated by Habs are of much interest and will repay careful perusal, it is greatly to be regretted that the author omits mention of one of the most important points, viz., recurrence of the herniæ. This has been shown by Bull, of New York, to be very frequent after all forms of procedure and the large number of cases reported by H.—169 recoveries—would, had they been carefully examined regarding ultimate results, have afforded valuable statistics.—*Deutsche Zeitsch. für Chir.*, Bd. 32, Heft 3 and 4, 1891. Ref. in *Annals of Surgery*, by C. A. P.

**Pilcher (L. S.) on Intravenous Saline Infusion.**—There can be no doubt regarding the value of this procedure nor of the failure on the part of a majority of medical men to appreciate its importance as a life-saving measure. The solution of common salt in plain boiled water, six parts in one thousand, suffices for all practical purposes.

P. narrates personal successes, and in language easily understood says :

No complicated apparatus is required for the infusion. We have used the well-

known Colin's transfusion apparatus because it is convenient and has been at hand. This comprises only some elastic tubing, a tip and a funnel with a syringe attached to it. The syringe, however, is unnecessary. A glass funnel, two or three feet of clean rubber tubing, and a bit of glass tubing for a tip to introduce into the vein is all the apparatus required.

The exposure and opening of the vein is one of the simplest operations possible, and may be done with the crudest instruments, if better should chance not to be at hand. I would guarantee to do it quickly and safely with a pocket-knife, a bent pin, and an ordinary pair of scissors to be found in any house, if the emergency required.

Let me urge the more general and frequent resort to this procedure in all cases of acute anæmia from hemorrhage and of profound shock that does not respond to ordinary stimulation. Let it be remembered that its value depends on the rapid diffusion throughout the circulating apparatus of a considerable volume of fluid, and that for this purpose no other procedure can compare with it for efficiency. Intra-arterial, intra-peritoneal, rectal, interstitial injections are all subject to great limitations, either as regards the rapidity or the volume with which they can pour fluid into the blood-vessels, and all are inferior to the intravenous method.

I am inclined to think that in my earlier cases an error was made in not injecting a larger volume of the solution into the vein. I am not satisfied now that some of my fatal cases would not have terminated differently if a larger volume of the fluid had been infused. Certainly the infusion, when once commenced, should be proceeded with until full reaction of pulse and consciousness are secured, and if later renewed collapse should threaten, it should again be done as boldly and as freely as at first.—*Annals of Surgery*, May, 1892.

**Arnd on the Methods and Results of Excision of Rectal Carcinoma.**—In an extensive, thorough, and clear work, A. compares the various methods which have been employed in dealing with rectal cancer, details at length the histories of 35 cases operated upon by Kocher, and analyzes 230 additional operations, which he gathers from literature.

The communication is of such interest that it deserves careful study. It is of

such length, however, that but few of its features can be noted here. Of interest it is to know that as long ago as 1874, Kocher published an account of an operation devised by himself for removal of cancerous rectum, which consisted in a posterior incision with excision of the coccyx. This he called the "long posterior incision," and he ascribed to it the advantages which render the now popular operation of Kraske so useful, viz.: extirpation of the cancer is done with greater ease, certainty, and completeness than by the older operations from below, and the bleeding is much more easily controlled.

So we must see that the Kraske operation brings to that of Kocher extension of the principle of posterior excision, and consequent ability to remove tumors which have a very high seat.

A. ascribes all credit to Kraske's procedure. He emphasizes with vigor, however, that in the great majority of cases of cancer of the rectum the long incision of Kocher will suffice. Of the modification made by Hochenegg, Henzfeld, Heineke, and Levy it is not necessary to speak in detail, the principle is that of Kocher, extended and emphasized by Kraske.

Of the entire number of cases the peritoneum was wounded in 69, and of these only 9 (13 per cent.) died from peritonitis. Without doubt these wounds should be closed by suture, and at the earliest possible moment. Kraske reports several accidents which followed this open treatment. In three of his cases the circular intestinal suture gave way, the proximal end of the intestine slipped back into the peritoneal cavity, and fecal infection occasioned a fatal peritonitis.

In nine of Kocher's cases was the peritoneum opened, and death occurred in each of the cases in which its suture was omitted. One died from suppurative peritonitis, one from delirium tremens with sepsis, and one from collapse. Only under exceptional conditions, then, should a surgeon resort to a peritoneal tamponade.

In dealing with the hemorrhage, which is always found in this vascular region, much depends on the rapidity and certainty with which the operator works. "Dry" dissection can be employed to a certain extent, but main reliance must be placed on the scissors and knife. When possible, vessels may be doubly ligated before division; yet rapid clamping and

quick ligation will achieve completion with the least possible loss of blood.

In considering the question of intestinal suture one must always remember that failure will follow here more frequently than in regions where the fecal masses are less firm and the muscular contraction less active. Preliminary colotomy, commended by Schede and others, offers many advantages in diverting the fecal flow, securing quiet and freedom from distension.

The form of suture and its material will be governed by the individual preference of the operator, and will be adapted to the case under consideration.

As with all operations the mortality statistics are of little value. They differ with different operators; they vary with the various forms of operation adopted, and with the seat and extent of the disease. It is worthy of mention, however, that a mean immediate mortality of 12.17 per cent. attends a total of 230 cases of rectum carcinoma subjected to radical procedure. Of the causes of death we call particular attention to but one, iodoform intoxication. Two fatalities are attributable to this out of Kocher's thirty-five cases.

Moreover König and Krönlein have reported two fatal results directly attributable to this dangerous drug. "That should suffice," says Arnd, "to caution one against the too free use of this powder. Would it not be safer and better to avoid it altogether?" Steierlin's warning regarding personal idiosyncrasy in the matter of susceptibility to "iodoformism" does not seem to be heeded as it deserves.

A. cannot share the exceedingly optimistic views of Bardenheuer and Steierlin regarding the future mortality attendant upon these operations. He feels, however, that despite the widening employment of radical attempts the mortality will surely decrease, thanks to a more certain care in the matter of bleeding, depressing antiseptics, and attention to after treatment. Concerning the chief point in all our malignant conditions, recurrence, we have no very certain data to guide us. Of ninety-eight collective cases, 24.5 per cent. are said to have achieved a radical healing.

Kocher's integral statistics, however, present better results, and of these the most favorable were those in which the posterior incision was employed. If we may be guided by Arnd's conclusions, we

may believe that the so-called Kraske operation—be it with or without a part of the sacrum—offers the greatest security against recurrence; and in this connection we may call especial attention to the astonishing fact that of twelve of Kocher's patients who survived this procedure—out of a total of seventeen operations, all of the cases histologically confirmed—nine, or no less than seventy-five per cent, were said to have been radically cured and were alive, free from recurrence, when examined four to sixteen years after operation.—Abstract in *Annals of Surgery*, by C. A. P.

**Landerer (H.) on the Treatment of Fractures.**—That in the treatment of recent, simple fractures constant efforts should be made towards devising means for reducing the length of time of treatment and returning the patient to his labor, functionally capable, on the earliest possible day, all must fully admit. When, then, a surgeon of Landerer's repute sets forth procedures which he avers capable of accomplishing such advance, he demands for such the most careful attention.

In the pamphlet under consideration, L. lays down the broad proposition that early permanent removal of confining dressings, together with passive or active motion, and systematic, intelligently applied massage, tend to such result.

Before considering in detail the various steps and proofs of this important allegation, one may with pleasure note the author's disapproval of the employment of embrocations or ice in the early stage. "They belong," says he, "to a bygone age—they can have no beneficial effect; away with them! The surgeon's first duty is to make an immediate and absolute reduction, and to at once apply a suitable, well-fitting apparatus which will maintain correct position." All surgeons will agree that only exceptional cases will be found in which this rule will not apply.

Turning, for example, to a simple Pott's fracture, we find that at the earliest possible moment after the receipt of the injury the limb is placed in a suitable position with adduction of the foot, and a moderately padded plaster splint is applied. Under this, pain, muscular contractions, and other discomforts abate at the end of twenty-four to thirty-six hours.

On the fourth or fifth day the splint is removed, good position of fragments and

foot assured, and another plaster dressing applied, this time rather more snugly. The patient is now allowed to go about on crutches. On the tenth or twelfth day the splint is "sprung off," and systematic massage, with cautiously-made passive movements, instituted. These are carried out twice daily. On the thirteenth day the patient is allowed to place foot to ground, first with the dressing, then without, still on crutches. If no contra-indications exist, old age, constitutional anomalies, etc., which would tend to hinder the ossification of the callus, the patient may be allowed to go about with two canes on the fourteenth day, with one cane on the seventeenth or eighteenth day, and he may dispense with this at the beginning of the fourth week. "Here," says L., "the soft parts receive the same attention as the bony, the ossification is hastened through the local hyperæmia, and œdema is removed."

In the case of a Colles' fracture, after immediate absolute reduction, short flexible splints are moulded to the limb. These do not confine the fingers, active motion in which is encouraged. They are curtailed on the fourth day, and entirely dispensed with on the eighth day, after which the limb is simply subjected to massage. After fourteen days the patients are able to do light work. The author does not employ plaster-of-Paris in Colles' fractures, saying with right that he cannot be as certain of the maintenance of reduction when using it.

In fractures of the patella, L. follows Tilanus and Von Wagner in relying chiefly on massage of the quadriceps, the fragments being drawn together by plasters and the limb resting in a simple splint. At the end of the third week or the beginning of the fourth, the patients begin to walk, and are said to be functionally capable, in many cases, in the fourth or fifth week. The author justly deprecates the conventional employment of any form of suture. Fractures of the neck of the femur or of the upper part of the humerus are treated in the same way, passive motion being commenced at a later date in the impacted than in the non-impacted cases. So, as well, with fractures of the leg; these are subjected to massage at the end of the third week, while one week later the patients are allowed to walk. As a matter of course other plans are adopted when the lesions are very oblique.

Fractures of the thigh are treated in the usual way, with extension apparatus, massage being begun in the fourth week. In the fifth or sixth week the dressings are discarded, the patient keeping his bed a week or two longer.

When the author recommends the employment of very early passive motion in such lesions as the multiple fractures at the lower end of the humerus we cannot feel that he will command the support of American surgeons, who are now, as a rule, very fully in favor of the principle of rest. We may easily believe him, however, when he says that massage is of much value in cases of delayed union. It is to be regretted that we are denied access to the histories of L.'s cases or to the only satisfactory testimony, viz., final results, with elapsed time and individual details. His clearly stated propositions are, however, of much interest and the publication will repay careful study.—Abstract in *Annals of Surgery*, by C. A. P.

**Abbe (R.) on Ideal Cholecystotomy.**—Abbe reports four interesting cases of gall-bladder surgery, of which only the following is cited. We can but think Czerny's device of bringing the sutured vesical wound up to the abdominal wound and leaving a piece of iodoform gauze passing to it, one of much safety. In case of breakage the fluid readily finds an exit along the bit of gauze, while, if union be secure, very little time is lost. The case is given in Abbe's words:

*Multiple Attacks of Biliary Colic during Four Months; Exhaustion; Cholecystotomy; Removal of Three Large Gall-Stones; Immediate Suture of the Gall-Bladder; Recovery.*—In April, 1891, Mrs. W., a lady of sixty-four years, came under my care with symptoms of chronic biliary obstruction. She had been for three months under the care of Dr. Partridge, of this city, who had watched her through many severe and constantly recurring attacks of biliary colic.

Her first attack dated to five or six years before. There was then a period of freedom until four months before I saw her, when she was seized with a most severe attack, repeated at intervals of a week or less during the four months following. Each attack was succeeded by moderate jaundice and progressive exhaustion. Though in the earlier intervals she resumed her work, she became too weak during the last month to leave her room.

The usual accompaniment of clay-colored stools and dark bile-stained urine followed each attack.

At last the pain became very continuous, and she was becoming exhausted. Her skin had a moderate jaundice only, persisting between attacks, though after each severe exacerbation she was quite yellow. I had her removed to a room at the hospital, where poulticing and massage soon relieved the pain and cholæmia, the urine becoming free from bile.

On any attempt to walk, however, pain immediately recurred. There was a moderate tumor the size of an egg at the site of the gall-bladder. A diagnosis of gall-stone obstruction of the cystic duct was made, based on the subsidence of cholæmia with continuance of pain and gall-bladder distention.

I operated April 24th by vertical incision.

The distended and elongated gall-bladder popped out of the wound as soon as the peritoneum was opened, and afforded an excellent opportunity for handling it without soiling the peritoneum cavity.

Three good-sized stones were found, the largest free, the two smaller ones wedged tightly in the cystic duct. The contents of the gall-bladder showed no suppurative change. The stones were, after considerable trouble, worked back into the gall-bladder and removed.

A small gum-elastic bougie was then passed into the common duct and onward far enough to show all obstruction removed.

I then ventured to do the ideal operation of suturing the incised gall-bladder and returning it into the peritoneal cavity. The mucous and peritoneal coats of the collapsed bladder being œdematous and sliding freely on each other, I thought best to make a separate suturing of each. With fine catgut I stitched the muscular layer so as to invert the mucous edges, and then with finest black silk sewed the peritoneal edges.

The abdominal wound was closed, as usual, in separate layers by buried sutures.

The patient made an uninterrupted convalescence, and left the hospital on the twenty-second day in excellent condition, having gained rapidly in weight, having good digestion, normal movements, and being free from pain.

At the present date (six months after operation) she remains in perfect health, is free from pain, and has resumed her work.

The abdominal scar is solid.—*N. Y. Med. Jour.*, Jan. 30, 1892.

**Abbe (R.) on Intestinal Anastomosis.**—A has discarded plates, rings, and the like, and now confines himself to simple suturing.

He believes that the perfect technique of suturing will be found in the following method :

Bring the two surfaces that it is proposed to unite well up in the wound, and surround them by small compresses of gauze or towels or flat sponges wrung out of hot water.

Have at hand a half-dozen fine cambric needles threaded with ordinary finest black embroidery silk that has been well boiled and kept in alcohol. Cut in lengths of not more than twenty-four inches and tie with a single knot at the eye of the needle, with one end cut to within two inches. Apply two parallel rows of continuous Lembert suture, a quarter of an inch apart, and an inch longer than the proposed cut. Leave each thread with its needle attached at the end of its row. Now open the bowel by scissors, cutting a quarter of an inch from the sutures, both rows of which are to remain on one side of the cut. Make the bowel opening four inches long. Apply clamps temporarily to several bleeding points, pinching the entire thickness of the cut edge without hesitation. Apply no ligatures. Treat the opposing bowel in the same manner. The clamps remaining *in situ*, the parts are quickly rinsed with water. Another silk suture is now started at one corner of the openings and unites by a quick overhand the two cut edges lying next the first rows of sutures. The needle pierces both mucous and serous coats, and thus secures the bleeding vessels, from which the clamps are removed as the needle reaches them. This suturing is then continued round each free edge in turn, and all bleeding points are thus secured more quickly than by ligature. The serous surfaces around these button-holes are then rapidly secured by a continuation of the sutures first applied, the same threads being used, the one nearest the cut edge first. The united parts are again rinsed with water and dropped into the abdomen.—*Med. Rec.*, April 2, 1892.

**Van Arsdale (W. W.) on the Treatment of Streptococcus Osteomyelitis.**—The author, with Koplik's aid, made a thorough study of this rare yet

generally fatal affection. In summing the treatment he says that the technique, as well as the indications, will differ for the various joints.

Thus, for simple suppuration of the knee-joint in the graver forms of osteomyelitis, it will suffice to open the joint by longitudinal incisions on either side anteriorly to the lateral ligaments, the incision also invading the large bursa under the quadriceps tendon.

For the hip-joint, however, the same affection will demand exsection of the head of the femur, because otherwise it is not possible to secure thorough drainage of the infected cavity.

The astragalo-crural articulation cannot be sufficiently drained after simple arthrotomy, so that partial excision of one or the other malleolus is indicated.

The shoulder-joint may be exsected for suppurative disorganization with more propriety in the adult, in order to prevent the ankylosis which would result after simple arthrotomy; but since in children interference with the epiphysis of the humerus means almost complete arrest of development of the bone, we may hesitate to do more than simple arthrotomy. Happily, the shoulder-joint appears to be less frequently attacked than the other joints. In most cases the elbow- and wrist-joints can likewise be sufficiently drained only after partial excisions, owing to their complex anatomical formation.

As to the smaller joints of the hand and foot, no general rules can be laid down; very rarely will amputation be called for. Such small bones as are attacked may be taken out subperiosteally, if possible. If the joints cannot be properly drained, exsection is here indicated. The smaller foci, however, do not threaten the economy in the same measure as do the foci in larger bones, and oftentimes we see an attacked small bone recover from its inflammation without necrosis.

As to the choice of antiseptic methods and dressings in these operations little need be said. Active antisepsis is to be preferred to simple asepsis as affording more success in combating the septic processes we are attacking. Sublimate, carbolic acid, and especially iodoform, however, should be avoided in the cases of young children, as too readily leading to intoxication in their prostrated condition. Creolin, in 1- or 2-per-cent. solutions, fresh-

ly prepared, has proved satisfactory in the cases here alluded to, especially when we cannot be certain of removing all the irrigating fluid from the joint-cavity.—*Amer. Four. Med. Sci.*, May, 1892.

**Soutter (M. K.) on Case of Fracture of Scapula Separating its Upper and Internal Angle.**—The patient, a Covent Garden porter, of fair muscular development, whilst carrying a box of fruit upon his head, slipped forwards, and the box at the same time falling backwards, its edge struck him on the back of the right shoulder. Upon recovering himself, he was unable to use his right arm and experienced considerable pain over the right scapula.

About half an hour after infliction of the injury there was considerable pain and tenderness but not much swelling over the part. The superior and internal angle of the bone was to be felt displaced downwards and slightly inwards, an irregularity being felt in the vertebral border just below the level of the spine. This irregularity was caused by the projection inwards and slightly downwards of the inner and lower angle of the upper fragments. Between these separated parts of the vertebral border could be felt a small part of the roughened edge of the lower border of the upper fragment. On grasping the upper fragment between the thumb and forefinger of the left hand, and fixing the spine by those of the right, the upper fragment could be moved upon the lower, distinct bony crepitus could be elicited, and the line of fracture could be made out running across the supraspinous fossa, extending from a point on the upper border of the bone two inches from its inner extremity, to the vertebral border just including the triangular smooth surface at the inner extremity of the spine.

Simple confinement. Recovery.—*Brit. Med. Four.*, March 19, 1892.

**Robb and Glnikey on the Bacteria in Wounds and Skin Stitches.**—The authors, working in Kelly's clinic at the Johns Hopkins Hospital, made careful examinations of the stitches and secretions in thirty consecutive cases of coeliotomy, and in fifteen cases of perineorrhaphy, and as a result present the following:

A wound at some time of its existence always contains organisms. They occur either on the stitches or in the secretions.

The number of bacteria is influenced by

the constricting action of the ligatures or drainage tube, or anything interfering with the circulation of the tissues.

The virulence of the organisms present will influence the progress of the wound.

The body temperature is invariably elevated if the bacteria are virulent; and, indeed, in cases where many of the less virulent organisms are found, almost without exception, there is some rise of temperature.

Different suture materials offer different opportunities for bacterial development. The catgut suture would seem to be the best adapted to their growth. In the event of the presence of the streptococcus pyogenes or staphylococcus pyogenes aureus infection, such cases should be isolated as far as possible, to prevent the infection of subsequent cases, which almost invariably follows where isolation is not practised.

Undue constriction of the tissue by ligatures must be avoided, if the tissues are expected to resist bacterial invasion.

Such bacteriological examinations as we have just reported teach us the importance of securing an aseptic field of work and technique, as the introduction of a virulent organism under the above circumstances would be productive of great harm.—*Johns Hopkins Hosp. Bulletin*, April, 1892.

**Williams (W. Roger) on Epithelioma of the Upper Lip.**—W. reports three cases, in none of which does it seem that a microscopic examination was made, and which must therefore be considered doubtful. In this connection the following figures are of interest, as showing the relative frequency of labial neoplasms, though they, also, can hardly be considered authentic.

Of 13,824 primary neoplasms of all kinds consecutively under treatment at St. Bartholomew's, University College, Middlesex, and St. Thomas' Hospitals during the last 16 to 21 years, 352, or 2.5 per cent., originated in the lips. These include 7,297 cancers, of which 332 grew from the lips, or 4.5 per cent. Of the 352 lip neoplasms, 340 sprang from the lower lip. Thus: epithelioma, 329 (M. 326, F. 3); papilloma, 7 (M. 4, F. 3); angioma, 3 (M. 1, F. 2); cystoma, 1 (M.). Only 12 originated in the upper lip. Thus: epithelioma, 3 (M. 1, F. 2); sarcoma, 4 (M. 2, F. 2); angioma, 3 (M. 1, F. 2); papilloma, 1 (F.); fibroma, 1 (M.).—*Brit. Med. Four.*, April 16, 1892.

**Colley (D.) on Strangulation of Undescended Testicle from Twisting of Spermatic Cord; Operation; Relief.**—

The following case is analogous in many respects to one reported by Von Meyer (*Deutsche med. Woch.* 1891) in which, also, prompt operation afforded relief.

H.P., aged fourteen, a van guard, was seen on October 4, 1884, with a painful swelling in the right groin. The right testicle had never descended, but had, as long as he could remember, been in the groin, forming a swelling considerably less than that for which he was admitted. The left testicle had always been in the perineum. The day before, he had pain in his right groin, and noticed that the swelling there had increased, and that he had an attack of vomiting. His bowels were moved that evening, but not since. The next day he was admitted into the hospital. He had then great pain in the right groin, where there was a very tender swelling the size of a hen's egg. There was no impulse on coughing. Small doses of tinct. opii were administered.

On the 3d, the day before, the pain was much less. Gentle taxis was employed under chloroform, but no improvement followed.

When seen he was a somewhat pale but well-nourished lad, and did not look ill or anxious. In his right inguinal canal was a swelling  $2\frac{1}{2} \times 1\frac{1}{2} \times \frac{3}{4}$  inches, very tender and with no impulse on coughing. The abdomen was soft, flat, and free from pain. His left testicle was of normal size, and lay in his perineum one inch behind the poste-

rior border of the shrunken scrotum. Its cord could be felt passing up into the external abdominal ring by a course considerably external to the usual position. The malposition of the left testicle never gave him any inconvenience.

Ether having been given by the house-surgeon, Mr. Z. Prentice, to whom I am indebted for some valuable information about the case, I cut down upon the swelling in the right groin. On opening a sac-like cavity, about half a drachm of blood or bloody serum came away. In this cavity were packed together three tense, black, shining, but soft ovoid masses, rather like small leeches, the largest an inch to an inch and a quarter long, with a diameter of three eighths to half an inch. Behind and below them was the testicle, of considerable size, the largest diameter being about seven eighths of an inch. The hydatid of Morgagni was at its lower and anterior extremity. Three black swellings and the testicle were connected together by rather tight constrictions, which were found to be due to a twisting of the cord; it required three turns to the right, that is, to the patient's left, before it lay straight. It now appeared that the testicle had no epididymis, but that the blackish swollen mass extending up to the internal abdominal ring took its place. In the uppermost half-inch of this one could feel the vas deferens, but not lower. Incision to the bottom of the scrotum, in which there was a process of the tunica vaginalis, which we slit up. Suture; prompt healing.—*Brit. Med. Jour.*, April 16, 1892.

## REPORT ON THERAPEUTICS.

**Payne (R. L.) on Viburnum Prunifolium.**—As a result of experiments the author summarizes the physiological effects of this remedy as follows:

First. Black haw, so far as these experiments indicate, exerts no influence on consciousness or sensibility.

Second. The most constant and marked effect of viburnum is upon the centres of motion. After its administration there follow paresis, paralysis of voluntary motion, and finally complete loss of all reflex power, the extent of this loss being governed by the dose administered. A first effect is paresis, which makes its appearance not suddenly, but as a gradually

growing weakness; then there follows marked inco-ordination of muscular movement, and whatever motion is attempted is of a jerky, spasmodic character; then, the effect being pushed, there occurs, almost suddenly, complete loss of voluntary movement; and later, in fatal cases of poisoning from this drug, all reflex power is lost some time before cessation of the heart's action or of the respiration. In cold-blooded animals the pupils contract under the influence of haw, but in warm-blooded animals no effect on the pupils was noticeable. Muscular irritability is lost after lethal doses of haw, but the ability of the nerves to transmit the elec-

tric current is lost before muscular contractility.

Third. The effect of viburnum on motion, as previously described, must be due to the action of the remedy on the motor centres of the spinal cord. The fact that inco-ordinate movement precedes complete loss of motor power, argues that haw has some selective action on the posterior columns of the cord. The effect of haw upon the cord seems to hold in abeyance, rather than to destroy, its motor functions, since after all motor power is lost following its administration, electricity applied to the cord causes motion in the parts below, and applied directly to the nerve-trunk causes more active movement. A peculiar, spasmodic, chewing motion of the jaws was observed in some of the experiments on rabbits, and would indicate a specific action, difficult of explanation, on the seventh pair of nerves. The functions of the cerebrum, as manifested in the persistence of consciousness and the sense of pain, show that viburnum exerts at least no primary action upon the brain.

Fourth. A constant and first effect of haw is to paralyze the vasomotor nerves, with consequent dilatation of the blood-vessels; the capillaries of the rabbit's ears become distended with blood. At the same time in warm-blooded animals the action of the heart becomes very rapid and feeble, and, later on, the vessels of the periphery become small with a fall in temperature.—*Phil. Med. News*, April 2, 1892.

**Bicknell (R.C.) on the Use of Fibrin Ferment as a Styptic.**—In experiments since undertaken on some of the smaller animals, I found that while injection simply of defibrinated blood which contains the ferment in active condition results in diminished rather than increased coagulability, the use of this, or a solution of fibrin ferment with the addition of 1 per cent. of calcium chloride, does answer efficiently as a styptic, used either as the ordinary styptic solutions are usually applied, or injected into the vessels near the bleeding point. It is fully as efficient as the ordinary solutions—as, for instance, solution of persulphate of iron—and is free from many of the objections attending their employment.

I have not had opportunity to test the efficacy of this plan in hæmatophilia, in connection with which it first occurred to

me; but as it so very nearly approximates the natural process as it occurs in the normal condition of the blood, I am inclined to believe in its practical value.

I submit these facts, and the suggestions arising therefrom, in the hope that by their publication they may come in the way of some in a position to apply the method and ascertain its practical worth.—*Nashville Med. Jour.*, May, 1892.

**Mattison (J. B.) on Untoward Effects of Codeine.**—In view of the fact that this alkaloid is often recommended in place of morphine, attention should be called to a peculiar physiological effect of the former. This effect, it is quite proper to say, has been seen only in ex-morphine and ex-chloral *habitués*, but it is fair to presume that a like idiosyncrasy will, at times, be met with among those not addicted to either drug.

The first case was that of a druggist taking several grains of morphine daily, to whom I gave twelve grains of sulphate of codeine in one dose by the mouth, as a substitute for four grains of morphine. In less than half an hour he began to complain of great general itching; his face swelled until one eye was quite closed; his hands were puffed until he could not shut them, and his body—notably the back—became covered with large scarlet patches. There was no disturbance of brain, heart, or lungs. Most complaint was made of the itching. Prompt relief of this was brought by fluid extract of witch-hazel, freely applied, and, with the redness, it soon subsided, but the swelling of the face and hands persisted for five days. There was no desquamation.

Since then I have seen four others—three, females—treated with doses from  $1\frac{1}{2}$  grains subcutaneously to 2 grains by the mouth, with the same though much milder results. As in the first case, the itching was most complained of, and a peculiar feature of this was that it began in the head. There was no redness. The man's face was somewhat swollen. In all, the hamamelis worked well.—*Phil. Med. News*, April 2, 1892.

**Wilcox (R. W.) on Anæmia: its Treatment with a New Preparation of Iron.**—The writer describes the different forms of anæmia with remarks as to the physical signs of the condition. Relative to treatment, Wilcox advocates the use of Weld's syrup of the chloride of iron,



each fluid ounce of which contains twenty-four minims of the tincture of chloride of iron. He concludes as follows :

1. In anæmia iron is by far the best remedy.

2. Of all preparations, the tincture of the chloride is the most valuable.

3. This preparation is objectionable in that it excites nausea, disgust, and vomiting ; stains and destroys the teeth.

4. These disadvantages are obviated in Weld's syrup of the chloride of iron.

5. In removing these disadvantages, its therapeutic efficacy is not in any way impaired.—*N. Y. Med. Jour.*, May 7, 1892.

**Mays (T. J.) on the Treatment of Fever in Pulmonary Consumption by Rest.**—In my treatment of phthisical fever I am, therefore, almost solely guided by the thermometer, and strive to keep the temperature below a hundred of Fahrenheit's scale, because my experience teaches me that such patients cannot be benefited permanently if the temperature habitually rises above this limit. On receiving a patient the diurnal variation of his temperature is tested, and if it exceeds one hundred he is placed in the recumbent position and kept there until it is brought under control.

Objections are often and freely raised against such a procedure because it is not in conformity with the prevailing doctrines which teach that patients of this kind should take an abundance of exercise in the fresh air out-of-doors. Confinement to bed, however, gives him neither, and hence it is a hard precept for him to accept. But a direct appeal to the reasoning faculty will convince most of these patients that exercise and fresh air are, after all, not so necessary to secure restoration. You can assure them on physiological ground that normally heat is developed by or during muscular contraction, and that a larger amount of heat is dissipated during muscular contraction in phthisis because the heat-regulating centres are already disturbed ; hence, by exercising, they elevate and aggravate the fever, and defeat the very end and purpose which the physician has in view.—*Practitioner's Monthly*, April, 1892.

**Chipman (H. A.) on Dyspeptic Diarrhœa of Infants.**—For the sake of treatment we may speak of two forms :

1. Where milk is speedily ejected and the passages are sour, green, and contain curdled milk.

2. Where there is less vomiting and the evacuations are putrid.

For the first class the following is very useful :

R Syr. rhei aromatic .....  
Liquor calcis.....āā ½ ii.  
Spt. ammon. aromatic..... 3 ii.

M. Sig. : One teaspoonful after each movement of the bowels.

Eliminate all carbo-hydrates from the food, and let albumen be given, but very sparingly, for twenty-four hours. The white of eggs, beef juice, or Bovine answer well.

For the second class we may use :

R Zinc. sulpho-carbolat.....gr. v.  
Bismuthi subnitrat.....gr. xxxvi.  
Lactopeptine.....gr. xxiv.

M. ft. chart No. xxiv. Sig. : One every two hours.

Here the food should consist of carbo-hydrates : barley water or starch water well cooked to convert the starch into dextrine. After the acute stage and in chronic cases, well diluted cream is very successful. Meat broths are useful in both classes.

These hints as to diet are only intended for the acute stage.

Properly diluted cow's milk or one of the many prepared foods will usually be suitable in two or three days.—*St. Louis Clinique*, April, 1892.

**Pope (F. M.) on the Value of Resorcin in the Treatment of Gastric Ulcer.**—The writer describes sixteen cases, of which five seemed to get well on the administration of resorcin. Great improvement of all symptoms was noted in seven, and failure in four. He further says : I prescribe the drug in five-grain doses simply dissolved in one ounce of water, and administered, as far as possible, when the stomach is empty. Is it not disagreeable. Milk diet is given, unless the vomiting has been very constant, when digested milk is sometimes substituted. I have not found it necessary to use nutrient enemata or suppositories since employing resorcin. Rest in bed in the recumbent position is insisted on.

Some of the improvement noted may be ascribed to the diet and rest in bed, but that this is not the only cause is apparent from the consideration of cases where the patient not only had these advantages, but also those drugs most generally used in such conditions, without

much improvement being noticed, while resorcin gave immediate relief. I do not, of course, maintain it to be an infallible remedy, but consider it far superior to any other with which I am acquainted. It appears to fail in cases of reflex nervous vomiting, and this is only what we should expect from what we know of its behavior outside the body.

With regard to its mode of action, I think its analgesic property the most valuable, as the stomach is able to tolerate food, while the extremely sensitive, ulcerated, or eroded surface is soothed by the drug. Then, secondarily, the checking of fermentation prevents further discomfort, and allows of healing proceeding steadily. Its hæmostatic action also must not be forgotten.

Before concluding, I must mention that I have found it of great service in certain cases of gastric cancer. Under its use I have seen foul tongues become clean, and stomachs which formerly rejected almost all food become tolerant and able to perform some work again, and patients have gained weight under the treatment. It does not, naturally, produce much effect upon the specific disease, but such tumors are frequently accompanied by a good deal of ulceration of a specific character, and thus the drug has the power of affecting beneficially, and at the same time the growth will probably proceed less rapidly when not irritated by the accompanying septic inflammation.—*Provin. Med. Four.*, May 2, 1892.

**Anderson (E.) on Two Cases of Dysentery Treated by the Long-Continued Use of Blue Mass, with Permanent Benefit to Health Resulting Therefrom.**—The combination of drugs used was  $\frac{1}{2}$  gr. of opium with 2 grs. of blue mass in a pill, and give one pill every two hours until the patient recovered.

On July 1, 1889, I was called upon to treat a lady, fifty-six years of age, all of whose family had dysentery, one son twenty years of age, having died a few days previously. She had had the disease ten days, and been treated by another physician with camphor and opium, but grew worse all the time. I fell heir to the case on account of the attendants being attacked by the disease. I treated this case according to the above described plan for ten days, with gradual improvement, when I became

appalled at the enormous amount of mercury taken, and stopped for a while; but the patient immediately grew worse, and I recommenced the same treatment, and kept it up, lengthening the intervals between the doses as she improved, until October 1st, when she was quite well. This lady's family history was good, every member except herself being robust, but *she* was thin enough to be remarked upon. Now she has gained flesh, looks vigorous, and one would scarcely recognize her for the same person.

The second case was that of a boy of twelve, whom I had been treating several years for marasmus; he was attacked with dysentery last fall, and I treated him as I had the first case, taking about two weeks to complete the cure. Immediately after this attack, his health began to improve, and now he is one of the most robust boys in the neighborhood.

These were the only two cases that resisted this treatment for any length of time, all the others having recovered in from one to six days.

After the large experience I have had with dysentery, I do not believe it possible to salivate any one whilst suffering with the disease.—*Four. Am. Med. Assoc.*, May 7, 1892.

**Lydston (G. F.) on a New Remedy in Pyuria.**—The patient (male, aged forty) had a tight and tortuous stricture of the deep urethra which was dilated with success. About a year after the stricture had been thoroughly dilated, the patient contracted a heavy cold and developed a slight cystitis with renal congestion. The renal symptoms disappeared, but the urine never cleared up completely, even under irrigation and other usual measures for controlling cystitis.

Later the urine was found to contain much pus and epithelium. A diagnosis of secondary pyelitis was made. The patient after various remissions of symptoms finally broke down, and experienced a loss of appetite, diarrhoea, severe night-sweats, and great prostration. L. had tried in this case very faithfully all of our rational measures, yet had failed to completely clear up the pyuria, although great improvement had occurred from time to time.

When he suddenly grew worse, however, L. decided to try the solution of the double chloride of gold and sodium, giving to the patient in addition Dover's pow-

der in small doses at bedtime for the purpose of checking the night-sweats. He began with fifteen drops of Clark's solution, and gradually increased it to thirty drops twice daily. The improvement has been almost marvellous. The patient claimed that within an hour after the first injection he was perceptibly improved, certain muscular pains of the limbs of which he had complained entirely disappearing; this, to be sure, is susceptible of a psychological explanation. At the present writing, six weeks after beginning the treatment, the patient is in excellent general health, having regained the number of pounds of flesh which he had lost, and is eating well. His bowels are regular, and he has absolutely no symptoms whatever referable to the kidney. The urine contains an exceedingly small quantity of pus, and is becoming clearer from day to day.—*Medical Age*, March 10, 1892.

**Adams (H. F.) on an Improved Apparatus for Estimating Urea.**—The writer believes that the familiar hypobromite process is the best and has adopted the following simple device to carry it out.

The ureometer is made from glass tubing having a little more than a quarter-inch bore. It is fifteen inches long, closed at one end, and curved at the other for about three inches, with a radius of one inch. It holds, filled, about seventeen cubic centimetres, and is graduated from the closed end in cubic centimetres. It is best filled with the sodium hypobromite solution by means of a long pipette, with a *small delivery*, which easily takes the solution from a bottle and prevents any spilling.

The urine is added by a pipette made of very small glass tubing curved to the same radius as the large tube. This curved pipette is long enough to contain something more than one half cubic centimetre, and is graduated to that amount. It is attached by a short piece of rubber tubing to an ordinary medicine dropper. This attachment allows the analyst to take up a little more than one half cubic centimetre of urine, and then to adjust exactly to that quantity without touching the bulb.

The pipette thus loaded is introduced into the tube full of hypobromite solution, exactly as a male catheter is passed. The pipette should have a very small delivery, allowing a very slow discharge of the urine. The overflow of the caustic solution is

caught in a beaker. The tube may be sunk in a vessel of water to the level of the remaining liquid, in order to correct the pressure, before reading the amount of nitrogen.

The solutions used, and the calculation of the result, are according to the usual standards. Each cubic centimetre of nitrogen is nearly the product of 0.000282 grammes of urea; or, each 1 % of urea, in the 0.5 c.c. of urine used, gives 1.77 c.c. of nitrogen. From these figures it is easy to graduate the tube so as to read the percentage of urea without calculation.—*Bost. Med. and Surg. Jour.*, May 5, 1892.

**Furst (M.) on the Toxic Action of Sulphonal.**—The characteristic sign of the intoxication is the enfeeblement of certain muscular groups, of a paralytic type, with ataxic phenomena; at times the pupil is dilated.

In mild intoxication the peristaltic vomitings and the intestinal secretion are augmented, and diarrhoea may supervene. When the intoxication is more serious, on the other hand, obstinate constipation prevails.

The temperature of the body is depressed, as also is the blood pressure. Cardiac activity is almost always increased in serious cases complicated with ischuria and constipation. Respiration is relaxed.

The exanthemata are symmetrical. In certain cases numerous efflorescences have been described—small symmetrical papillæ, dotted, red, dark, etc.

Disturbance of sensibility, enfeeblement or abolition of the cutaneous reflexes, have also been observed, with conservation or increase of tendinous reflexes. At times also there are hallucinations, diplopia, visions, mania.

The urine, colored a red brown, contains hematoporphyrine, which may be discovered by the method of Salkowski, based on the precipitation of the coloring matter by the alcoholic solution of chloride of barium. The precipitate, treated with water, and then with absolute alcohol, is thereupon heated with a mixture of ten cubic centimetres of 300 absolute alcohol, and six to eight drops of hydrochloric acid; on filtering, the spectroscope will reveal the lines of absorption.

In the urine will be found, also, traces of albumen and of the renal elements, and a small quantity of unmodified sulphonal, the greatest part of which is eliminated by

the organism in the form of soluble sulphates.

The administration of sulphonal must accordingly be suspended when coloration of the urine is observed and the presence of hematoporphyrine becomes suspected. *Internat. klin. Rundschau*; *Med. Age*, April 1892.

#### Eliot (J.) on Cocaine Poisoning.

—R., age twenty-seven years, male, physician, applied for relief from acute nasopharyngitis. He had used, previous to consultation, a twenty per cent. solution in Dobell's solution as a gargle. The neuralgic symptoms were: great pain radiating in all directions, even to the shoulders; marked fever and accelerated pulse; throat intolerant to applications. Nostrils were sprayed with Dobell's solution, then with spray of *pinus canadensis*; he was also given gr.  $\frac{1}{10}$  aconitia every hour, Hancock's sedative lozenge, and a saline purge. About two o'clock of the same day the patient was seen again; condition unchanged; he was given antikamnia—three eight-grain doses, but it failed to relieve the pain.

About seven o'clock he was seen again—suffering still intensely. A four per cent. solution of cocaine hydrochlorate—possibly half a drachm—was sprayed into the nostrils. In two or three minutes the pa-

tient became dizzy, walked across the room, and fell on a sofa; complained of nausea and weakness. Pupils became dilated, and eyes assumed a vacant stare; pulse rose rapidly, and forehead became bathed with perspiration; limbs cold, and patient became pale. Respirations became feeble. Did not lose consciousness, although he did not answer questions addressed to him; he told me afterwards he could not distinguish what I had said, but had heard me. He was given  $\frac{3}{4}$  ij. of whiskey, and in a few minutes felt well with the exception of nausea—the pain having disappeared.

An attempt to rise brought on a return of the weakness, vertigo, and the condition already mentioned. He was given more whiskey with good effect. A third attempt to arise and go about the room brought back the above symptoms, which yielded to gr.  $\frac{1}{10}$  of atropia. Aconitia had been discontinued.

In about an hour, he walked home; pain recurred, and he had a bad night, taking opium to relieve pain and induce sleep, and whiskey to relieve weakness.

The next day, to confirm the diagnosis of cocaine poisoning, he, at his suggestion, was subjected to the cocaine spray, which brought on the same toxic symptoms.—*Va. Med. Month.*, Feb., 1892.

## REPORT ON PRACTICE OF MEDICINE.

**Ayer (A. D.) on Rötheln.**—In a series of cases recently treated the writer experienced the usual difficulty in making a differential diagnosis from scarlatina, and calls attention to the excellent article of Malcolm Morris on this point. Ayer says (speaking of his own experience):

In one case, in a child, the onset was sudden, with vomiting; the rash was distinct; the strawberry tongue was plain; the glands were swollen, also the uvula, tonsils, and posterior walls of the pharynx; the pulse was 140; the temperature 103.6°. On the following morning, however, the pulse was 99, the temperature 99°; the rash was distributed all over the body, except on the neck and face. The redness disappeared on pressure, but at once returned when the pressure was removed. In only one or two of all the cases did the rash appear upon the face.

Morris describes rötheln as an acute

infectious disease, characterized by an eruption of red blotches, slight sore-throat, coryza, and but little constitutional disturbance. If the spots be large, they are generally irregular in shape; if they be small, they are more crowded together, and present an appearance more resembling the eruption of scarlatina. He speaks of the rash as appearing on the face, but in my recent cases there was none on the face; although in some similar cases seen four years ago the rash did appear on the face. The rash lasts about two days, and then fades away, leaving a slight brown stain that gradually disappears; it is rarely followed by desquamation, and if at all, in minute scales. In my cases, except in those sick before the rash appeared, the rash faded within from forty-eight to seventy-two hours, and the desquamation was scaly. The constitutional symptoms that accompany the appearance of the rash are

chiefly those of catarrh, and occur at the same time as the rash appears, or precede the rash by less than twelve hours—not by some days, as in measles.

The tongue is coated with white fur, through which a few large papillæ can be seen (our strawberry tongue), more often at the tip than elsewhere (such was the case in my patients). The fauces are somewhat injected, and the tonsils may be swollen.

An important symptom is the tendency of the lymphatic glands to become enlarged. This is more constantly the case with the glands of the neck, especially with those situated behind the sterno-mastoid muscles, but the glands of other parts of the body are not always exempt, as two of my patients complained of swellings in the groin, where the lymphatic glands were swollen and tender. The prognosis is favorable. No special treatment is required.—*Phil. Med. News*, March 5, 1892.

**Hubbard (A. H.) on Malignant Noma.**—I was called at midnight to see a boy, eight years of age, said to be crying bitterly from pain in the right cheek. On my arrival at the place I found the boy with his face wrapped in woollen cloths, on removal of which a mass of putrid flesh came away, leaving a hole in the cheek two inches in diameter.

There were no signs of inflammation; his mother said he had complained of pain in his cheek since the afternoon before, but as there was no inflammation she paid no attention to it. The parents are both of pure Indian blood, and manifest perfect health; they say their child never suffered a day's sickness in its life.

I dressed his face, gave an anodyne, and returned to my office. At daylight I was called in haste, the messenger saying the boy was crying bitterly from pain in the other cheek. On my arrival I discovered a dark spot in the centre of the cheek, the size of a five-cent piece. I applied carbolized cotton to the inside and a charcoal poultice to the exterior, and left to return in two hours. On removing the dressing at my next visit, to my astonishment a piece of the cheek, about two and a half inches in diameter, came away with the dressing. There was no inflammation. The gangrene formed a line of separation and came out leaving ragged edges. While I was redressing this wound the boy complained of pain in the end of his nose; in

two hours' time his nose was enveloped in gangrene.

The boy died in forty-eight hours from the first attack. A case of symmetrical gangrene from pyæmic embolism. What was the cause? I find nothing recorded in books of a like nature.—*N. Y. Med. Record*, Jan. 9, 1892.

**Shields (M.) on Spina Bifida Occulta with Necrosis of the Foot and Talipes.**—Shields exhibited before the Medical Society of London a man aged twenty-three, who came under observation on Dec. 21, 1891. He had lately been an inmate of the Orthopædic Hospital, under Mr. Fisher, and the latter gentleman had operated on the "club-foot" (talipes equino-varus) with exceedingly good result. A photograph was shown of the feet before operation. When first seen by Mr. Shields there was a typical perforating ulcer under the left fifth metatarso-phalangeal joint. The orifice was surrounded by thickened, callous corn-tissue, and the probe reached carious bone. A bad corn also existed in a similar position on the right foot. On examining the spine a depression could be seen and felt in the lower lumbar region, and here the arches of the vertebræ appeared to be absent, and there was a growth of dark hair upon the skin. The mother of the patient stated in a letter that the medical man noticed, and spoke of, this condition at birth. She also made the spontaneous statement that for many years the child had no control over the evacuations of the bowels, and it was an interesting point that even now the patient could not restrain his bowels when he had the diarrhœa. The talipes was probably congenital, but had got rapidly worse in the last few years. In conclusion, Mr. Shield referred to the few cases of Virchow quoted by Sutton, and pointed out the similarity which existed between many of the cases quoted by Mr. Sutton and the present one. He had reason to believe that many of these cases were overlooked in practice.—*London Lancet*, March 26, 1891.

**Carpenter (J. S.) on Paralysis after Measles.**—The patient was three years old, and three weeks previous had had a mild scarlatina. On the third day of the measles it was noticed that she was breathing heavily and lay in a profound stupor. Being sent for hurriedly, I found the little patient in high fever, with stertorous breathing, and apparently unconscious, but she

was able to answer my questions, although she immediately relapsed into stupor. I had her placed in a lukewarm bran bath, and prescribed appropriate remedies. Within thirty-six hours I had the satisfaction of obtaining a renewal of the favorable conditions that had preceded the attack, and in a few days more the girl was convalescent. The first attempt to walk, however, revealed an inability to lift the right foot, which was dragged after its fellow in efforts at progression; the same motor disturbance was discovered to have affected the right arm, after I had been summoned; this had hitherto escaped attention because of the child always having been left-handed. The loss of co-ordination was shown in the child's attempt to pick up small articles from the floor, the hand not only being unable to grasp the object, but being projected forward with some violence, or to either side of its destination; and, finally, when anchored safely at the objective point, after successive trials, the sound member was called to the aid of its palsied fellow to secure the desired article in full possession.

The cause of this palsy was not at all easy for me to ascertain at the time, nor was the solution of the problem decided upon at all satisfactory to myself. I had been unable to discover the slightest trace of diphtheritic trouble in the entire progress of the case, and when informed that the child had had a spasm prior to my reaching the house, at the time of the occurrence of the unfavorable symptoms noted, I was particularly careful to re-examine the throat, fearing lest some implantation of a diphtheritic character had occurred. I discovered nothing more than the usual congested condition of the fauces that is always found in this disease. But paralysis after measles *without diphtheria* as a causal factor seemed hardly admissible, and my conclusion, therefore, was that a *concealed* post-nasal diphtheria was responsible for the disturbance, and I so stated to the family.—*Phil. Med. News*, Feb. 13, 1892.

**Mason (A. L.) on Typhoid from 676 Cases Admitted to the Boston City Hospital in 1890 and 1891.**—After an elaborate study of this vast amount of clinical material, the author concludes:

1. That in the Boston City Hospital the mortality in typhoid fever from patients admitted moribund and with grave complications is 4 %.

2. That at least 3 % more die from intestinal perforation and hemorrhage.

3. That little diminution in the mortality from these causes can be expected under any mode of treatment.

4. That the mortality from renal, pulmonary, and circulatory disturbances, from diarrhoea and pyrexial exhaustion, is about 3.5 %.

5. That, excluding deaths from intestinal perforation and hemorrhage, the mortality among females is 3.4 % greater than among males.

6. That a diminution of 2 % in the general mortality might be expected from the systematic use of cold baths, the reduction being largely in females.

7. That favorable results followed the trial of intestinal antiseptics, but that relapses were not prevented thereby, and that a much wider experience is necessary to determine their value.—*Bost. Med. and Surg. Jour.*, April 14, 1892.

**Edwards (A. R.) on Ehrlich's Test of the Urine in Typhoid Fever.**—The writer believes himself warranted to conclude as follows:

1. The reaction is independent of any single disease or any group of diseases.

2. It is frequently found in urine containing albumin, peptone, biliary substances, sugar, aromatics, and possibly leucomaines or ptomaines.

3. We have failed to obtain more constant results with the absolute alcohol than without its use.

4. Ehrlich's test is not always present in typhoid, even at the acme of the disease; it was absent in  $1\frac{1}{2}$  % of our cases. The reaction, therefore, is at best only a presumptive, and not a positive, evidence of typhoid. Its value is on a par with that of gurgling and tenderness in the right inguinal region and inferior to the temperature, roseolæ, and splenic tumor.

5. Together with more reliable signs and symptoms, as temperature, enlarged spleen, etc., it may contribute to a diagnosis of typhoid, and conversely, when absent, in 98 $\frac{1}{2}$  cases out of 100, the disease is other than typhoid.

6. It is found in many other diseases, some of which, in certain clinical features, may simulate typhoid, e.g., septicæmia, uræmia, tuberculosis in its varied aspects, intestinal, peritoneal, miliary, etc., as well as enteritis, malaria, and pneumonia. In differential diagnosis, therefore, when other

distinctive symptoms are lacking, the sulphuric acid test is untrustworthy. It fails when most keenly wanted, and may be absent in otherwise typical typhoid fever.

7. If much reliance is placed in the test, a typhoid relapse may be confounded with complications. We have observed, as complications and early sequelæ yielding the reaction, acute nephritis, lobar pneumonia, pulmonary tuberculosis, pleurisy, etc., and would have been at a loss as to the cause if confidence had been reposed in the test.

8. Inasmuch as it occurs typically in many diseases in which the causes and elaborated products differ, and since the various compounds with which the diazobenzene-sulphonic acid unites are as yet unknown, the reaction cannot commend itself to the scientific chemist, however it may be regarded clinically.—*Phil. Med. News*, April 2, 1892.

**Donald (J.) on Noma as a Complication of Enteric Fever.**—On Sept. 9, 1891, I began to attend two children, Lizzie B——, aged four, and Jane B——, aged eight, both of whom were found to be suffering from enteric fever. They had been ailing for about a week, Lizzie B—— having been taken ill a day or two before her sister. The symptoms all through were much alike in the two cases, the nervous symptoms predominating. There was marked prostration, and great restlessness and delirium of a low type. The temperature varied from  $102.5^{\circ}$  to  $104^{\circ}$ , and the pulse ranged from 110 to 130. Diarrhœa was present in both, but persisted longer, and was with difficulty controlled in the elder. No rash could be found in either case, and there were no lung complications. The tongue was dry and cracked, and there were abundant sordes on the lips and teeth. About Sept. 13th the pulse became very weak, and there was a tendency to heart failure. This was combated with stimulants, given freely in the form of diluted brandy; but it was with difficulty that they were roused from their lethargic condition to partake of this and other necessary nourishment. With the persistence of such a low "typhoid" state, the prognosis was very bad, and when noma set in their recovery was practically hopeless. On Sept. 16th a hard swelling was felt in the right cheek of the younger, which gradually increased in size and got tense and glazed externally. Ulceration took place internally, and the disease

did not follow the rapid course that sometimes occurs. The child remained in a comatose condition till Sept. 20th, when she died, before perforation of the cheek had taken place. On Sept. 18th noma was found in the right cheek of the elder girl, and pursued a similar course, till she died, in the same comatose condition, on Sept. 22d.—*London Lancet*, Feb. 20, 1892.

**Schalk (E.) on a Case of Anosmia.**

—Mr. K——, thirty-eight years of age, a carpenter by trade, one night on coming home fell down-stairs. Toward morning he was found unconscious lying at the foot of the stairs. When I saw him in the morning he was still in a somnolent condition. There was profuse perspiration, the temperature was normal, pulse slow, respiration distinctly lessened and of a Cheyne-Stokes character. Pupils, of equal size, reacted normally. There had been some oozing of blood from the mouth, but not from nose or ears. Loud calling aroused him so that he would open his eyes, but he would instantly fall back in his former condition. In the region of the occipital protuberance there was a scalp wound about two inches in length, which subsequently healed by primary union. This condition of semi-coma lasted about forty-eight hours, when he suddenly awoke without recollecting anything of what had happened.

Total anosmia was the permanent result of this fall; his sense of taste was not impaired, and there was not, and is not now, any paræsthesia or anæsthesia of any kind. The patient did not complain first of his loss of smell of which he was aware, but of a loss of appetite. Everything seemed to him to taste alike, and he could not enjoy his meals. His anosmia has remained unchanged for many months up to date.—*N. Y. Med. Record*, May 12, 1892.

**Duryee (C. C.) on Tænia as a Cause of Persistent Intercostal Neuralgia, also of the Eruptive Form — i. e., Herpes Zoster.**—A little over a year ago the writer was called to attend A. W., aged twenty-eight years, for severe pain over the left side of the thorax. The pain had appeared about a week previous to my first visit, and had been growing severer and confined him to his bed. Tenderness along the seventh and eighth intercostal nerves was made evident by pressure. The diagnosis was intercostal neuralgia, which, perhaps, might be the precursor of herpes zoster. Various remedies were

tried with little or no result Morphine was administered in sufficient quantity to render his distress at all bearable. Matters continued thus for about two weeks, when my patient called my attention to some segments of tape-worm which he had that morning passed, the first he had ever observed. Treatment for tape-worm was promptly given, with the result of dislodging a worm of about the usual length. The pain in the side rapidly began to subside, and Mr. W. was soon at his business.

A short time after, a gentleman sent for me who had a severe and typical herpes zoster. At my suggestion he examined his stools for a day or two and discovered that he was infested with tænia. Treatment resulted in a worm being removed about twenty-eight feet in length, probably a beef-worm.

Since my attention was drawn to the first case related I have seen eight cases of tape-worm, in which four of the persons had either severe intercostal neuralgia or undoubted shingles.

Herpes zoster is an expression of more or less acute neuritis of the intercostal nerves, as are also many cases of intercostal neuralgia.

The causes of these severe and oftentimes persistent diseases are obscure and are given as compression, nerve injuries, operations, atmospheric changes, etc.

I have never seen the presence of tænia given as a causative influence in these troubles, but I am of the opinion that it is of more or less frequent occurrence, and that those affections are probably reflex symptoms of the digestive disturbances occasioned by that parasite. Be that, however, as it may, the foregoing suggestion may be of practical utility in some obscure and annoying cases.—*N. Y. Med. Jour.*, March 6, 1892.

#### Harrison (D.) on Nerve-Grafting.—

The paper read by the author before the Clinical Society of London, recalled the excellent results that follow close apposition of the ends of divided nerves. The author observed that the only satisfactory method of dealing with nerves, the ends of which are too far apart to admit of their being sutured, was by nerve-grafting. He referred in detail to the history of eight cases in which this operation had been performed at home and abroad, and then proceeded to narrate the following case

under his own observation. A lad, æt. thirteen, was admitted into the Liverpool Northern Hospital on June 4, 1891, with the following history: Eleven weeks before, a glass cut of the front of the right wrist divided *inter alia* the median nerve and all the flexor tendons except the *flexor carpi ulnaris*. On admission the fingers were found to be immovably fixed in the flexed position, paralysis of both motion and sensation being complete, corresponding to the median nerve. Trophic changes were also present, the hand being blue and cold, the skin glossy, and the short muscles of the thumb much atrophied. He explored the site of the original injury and found the flexor tendons matted together and nearly two inches of the nerve had been destroyed, leaving a gap between the ends. After dealing with the tendons the nerve ends were freshened thus increasing the separation to two inches, and a graft, two and a quarter inches in length, taken from the sciatic nerve of a recently killed kitten was fixed in a position by one fine catgut suture at each end passing through the substance of the nerve. The limb was then put in a splint, with the hand flexed and the fingers straight. The wound healed by first intention. Sensibility began to return in the palm of the hand and over the first phalanx of the thumb at the end of forty-eight hours, and by the third day had extended to the first phalanges of the index and middle fingers and the terminal phalanx of the thumb, and eventually over the middle phalanges of the index and middle fingers. Sensation has not returned to the tips of the fingers. There was also transference of sensation, impressions from the first phalanx of the index finger being referred to the corresponding area of the middle finger. At the end of three months the nutrition of the hand also showed great improvement. Motion showed no signs of returning until the end of five months, when slight voluntary movement was observed in the short muscles of the thumb. Though still feeble these movements are improving, and within the last three months the patient has been enabled to oppose the thumb to the index finger. The flexion of the fingers upon the palm is not perfect, doubtless on account of the destruction of the tendon of the *flexor sublimis digitorum*. Another case of the same kind had still more recently been



performed by Mr. Mitchell Banks, of Liverpool, upon the ulnar nerve at the elbow after excision of a neuromatous tumor, four inches being grafted from the sciatic nerve of a dog. Sensation was stated by the patient to have returned within thirty-six hours. Of the ten cases quoted by him three have been perfectly successful, six partially successful, only one proving a failure. He attributed the difference in the success attending primary and secondary grafting to the trophic disturbances which are present when grafting is resorted to as a secondary operation. Restoration of function takes place readily enough after long periods of time in respect of sensory nerves, but the degeneration which takes place forthwith in the distal portion of motor nerves renders the repair slow and the return of function very gradual. — *Med. Press*, March 16, 1892.

**Sternberg (G. M.) on Micrococcus Pneumoniæ Crouposæ.**—The author alludes to the work of others in the discovery of this germ, and claims therein priority. He says: "In January, 1885, I made a series of experiments with pneumonic sputum, which led me to the identification of the oval coccus, usually in pairs, found in this material with the micrococcus previously isolated from my own saliva. In the paper in which I gave an account of these experiments, I named the micrococcus in question *M. Pasteuri*—a name that has not been generally accepted, and for which I now propose to substitute the name placed at the head of this paper, *M. pneumonia crouposæ*. In my paper last referred to, which was read before the Pathological Society in Philadelphia, in April, 1885, and published in *The American Journal of the Medical Sciences* for July of the same year, I say: 'It seems extremely probable that this micrococcus is concerned in the etiology of croupous pneumonia . . . but this cannot be considered as definitely settled by the experiments which have thus far been made upon the lower animals.'"

Recognizing this, we propose hereafter to designate it *Micrococcus pneumonia crouposæ*. This corresponds with the nomenclature adopted by Flügge in describing other pathogenic bacteria—*e. g.*, *M. gonorrhœa*, *B. typhi abdominalis*, *Spirillum cholerae Asiaticæ*.

The name "*diplococcus pneumoniae*,"

which has been adopted by most German bacteriologists, and, following them, by many English and American authors, is objectionable because this coccus is not truly a diplococcus, although commonly seen in pairs in preparations made from pneumonic exudate, or from the blood or an infected rabbit. But it is also frequently seen in short chains of three or four elements, and in cultures upon nutrient agar it often forms long chains. It is, therefore, more properly called a streptococcus. Gamaléia calls it *Streptococcus lanceolatus Pasteuri*. We prefer, however, the more general generic name "*micrococcus*," and do not consider it necessary that the name should be descriptive of the mode of grouping of the cocci.

It may be questioned whether "*diplococcus*," as a generic name, is entitled to a place in our nomenclature. It simply represents a form of association that is common to all micrococci, although more persistent in some than in others, and which results from their multiplication by binary division. Now, some of the so-called diplococci multiply in one direction only, forming pairs, and longer or shorter chains, as in the case of the micrococcus under consideration; while others multiply in two directions, forming pairs and, by transverse division, groups of four—*e. g.*, *Diplococcus citreus conglomeratus* (Bumm), *Diplococcus roseus* (Bumm). Thus a most important generic character—division in one or in two directions—is ignored by those bacteriologists that use the term diplococcus as a generic appellation.

Again, some of the micrococci commonly described under the generic name "*streptococcus*" are seen, under certain circumstances, only, or chiefly, associated in pairs.

We object, then, to the use of the term "*diplococcus*," as a generic name for micro-organisms of this class, as being unscientific and misleading.—*Phil. Med. News*, Feb. 6, 1892.

**Roosevelt (J. W.) on Practicable and Impracticable Methods for Preventing the Spread of Phthisis Pulmonalis.**—In a recent discussion at the N. Y. Academy of Medicine, the author held up to ridicule the idea that a condition of sepsis could be induced by the spray of carbolic acid which should kill the germs floating in the air, also that germs of disease could be destroyed by

rectal injections of gas, the inhalation of hot air, or swallowing a sufficient quantity of an antiseptic solution. Nor would much be accomplished by promulgating any scheme which in its main feature dealt with disinfection by the individual.

Passing to the consideration of the most frequent sources of infection, the author said that from inhalation of dried sputum in the air had received attention at the last meeting, and he would only speak of the danger of ingestion of tuberculous meat and milk. The flesh of cows and fowls was often tuberculous, and from this source was one of the greatest dangers of infection. The author expressed the opinion that there was really no such thing as a localized tuberculosis. That where there was apparently a local tuberculosis, shown for instance in enlarged glands, the tissues in any part of the body might contain the tubercle bacilli, although in a latent state, and it was unsafe to use the animal for food. It was his opinion that no amount of money would justify letting an animal live, even when suspected of tuberculosis.

The danger of tubercle bacilli getting into the respiratory passages, and especially of reaching the lungs, was a great deal less than the danger of entering the alimentary canal. It was not seldom that in sweeping rooms with closed doors and windows, it was done in a manner to stir up a great deal of dust laden with the bacilli of tuberculosis, yet it was under such favorable conditions that the cases of known infection by this method had taken place. There was much more likelihood of getting an overdose of the virulent germs through the alimentary tract either by the ingestion of meat, milk, or in children by putting articles of every nature into their mouths, no matter where they may have lain. Whatever plan might be adopted by the Board of Health, by medical societies, etc., for preventing the spread of tuberculous phthisis, none would prove effective without constant reiteration from year to year.—*N. Y. Med. Record*, March 5, 1892.

**Prevention of the Spread of Tuberculosis.**—The Royal Minister of the Interior of Wurtemberg issued instructions last month regarding measures to be taken for the prevention of the spread of tuberculosis in the work-houses and prisons. In the first place it is directed that in all parts of the

work-houses suitable spittoons be placed in sufficient quantity, each provided with a thin layer of water at the bottom. These spittoons must be emptied, if possible, daily in the closets, and afterward rinsed out with hot water. Inmates and attendants are to be strictly obliged to use the spittoons and to keep the different parts free from all expectorated material. Inmates who are suffering from tuberculosis are to be carefully watched that they do not transgress the regulations.

If the floor or walls get soiled with expectoration, it is to be removed by hot water, or in some other suitable way.

Tuberculous patients are, as far as practicable, to be kept apart from the others. It is recommended, where possible, to set apart a special room for the reception of tuberculous patients.

Rooms that have been occupied by tuberculous patients are to have their floors and walls thoroughly disinfected before others are permitted to occupy them. For this purpose walls and floors not painted are to be fresh whitened, and where the floor and walls are covered with paint, washing them with hot water will be sufficient.

All linen used by tuberculous patients must be thoroughly boiled. All cleansing of rooms occupied by tuberculous cases must be by washing.

It is directed that the above orders shall apply to the prisons.

The visiting medical officers, both in their treatment of the sick inmates and in their official visitations, are to see that the above-named regulations are carried out.—*Med. Press*, March 2, 1892.

**Bokenham (T. J.) on the Influence of the Anthrax Virus on Tuberculosis.**—Dr. Perroncito has recently announced the results of some experiments which were undertaken with a view of ascertaining the influence of vaccination against anthrax upon the susceptibility of animals to tuberculosis. He was led to make this inquiry by observation of the fact that in Italy the districts in which protective vaccination of cattle against anthrax had been adopted on a large scale were remarkably free from tuberculous disease. He had stated that (1) cattle vaccinated against anthrax are insusceptible to tuberculosis; (2) the saturation of a tuberculous animal with anthrax virus renders the tuberculous disease stationary, and

renders the tuberculous nodules inert when tested subsequently by cultivation or by inoculation of guinea-pigs; (3) rabbits were unsatisfactory animals for the experiment, for if a strong virus were used for the vaccination the animals died of anthrax, and if a weak one were employed they died of tuberculosis. In other words, Dr. Perroncito was not successful in vaccinating his rabbits against anthrax, and therefore had no means of estimating the true effect of this vaccination on the tuberculous process. At least, that is the impression I gather from a note of his communication which appeared in the *Gazetta degli Ospitali*.

I have myself made some experiments on the same subject—not on cattle, but on rabbits only—and although the inquiry is by no means complete, I think it well to make known the results I have obtained, as they form an important control to those of Dr. Perroncito.

Although it is not by any means easy to vaccinate rabbits against anthrax, I have succeeded in doing so in six instances, and these animals I used for observing the course of tuberculous infection in the soil thus prepared. They were all inoculated with matter from the tuberculous lymphatic gland of a calf.

The result was as follows: Four of the animals, immune to anthrax, contracted general tuberculosis, and died in about the same time as a control rabbit inoculated with the same material. The nodules in these animals were quite infective, as I have since proved. The fifth contracted a local tuberculosis at the point of inoculation, and in the remaining animal an acute suppurative process developed around the introduced caseous matter, resulting in much loss of tissue, but eventual perfect healing. The animal is still apparently quite healthy. I cannot consider this an instance of protection against tuberculosis by the previous anthrax vaccination, as I have observed exactly the same thing take place in an unprepared animal. I have had an opportunity of carrying out, as Dr. Perroncito has done, the experiment with the higher animals (oxen), but the observation must be repeated with the same successful results before any generalization from it can be accepted. I hope to be able before long to supplement these results by other observations now in progress.—*British Med. Jour.*, Feb. 27, 1892.

**Walsh (D.) on Rupture of Unsuspected Aneurism of Lower Part of Thoracic Aorta.**—S. W., aged fifty-four, male, laborer, admitted to the surgical wards of the Birmingham Workhouse Infirmary suffering from abscess in the buttock. Patient complained of severe pain and tenderness over the spleen, and as he had formerly served as a soldier in hot climates, and dulness was found on percussion in the splenic area, pending further investigation, these symptoms were attributed to malarial mischief. Meanwhile the gluteal abscess was opened and the case kept under observation. However, five or six days after admission, upon getting out of bed, the patient died suddenly.

**Post-mortem.**—Seventy-five ounces of blood and clots were found in the left pleural cavity. This had evidently issued from a ragged rent at the lower and inner aspect of the pleura. A large aneurism, the size of a cocoa-nut, was found at the lower part of the thoracic aorta, its under surface being firmly embraced by the pillars of the diaphragm. At the under surface, extending up the right side, was a large biscuit-shaped clot, pale, tough, and honeycombed. There had evidently been an attempt at spontaneous cure under the pressure applied by the diaphragm. The patient had been a soldier and had served in India. No traces of syphilis were observed. The tumor was firmly adherent to the vertebræ, the bodies of which were deeply eroded, and rupture appeared to have taken place in the direction of least resistance, namely, the pleural cavity. The sac was apparently formed of the coats of the artery, and constituting a fusiform aneurism.

**Walsh (D.) on Double Thoracic Aneurism.**—E. H., female, æt. forty-four, hawker, first came under treatment in February, 1889, with symptoms of chronic bronchitis. The urine had a specific gravity 1010, acid, no albumen. After a stay of two months patient was discharged at own request.

She was readmitted shortly afterwards, and chronic bronchitis diagnosed, with suspicion of alcoholism. Was again discharged after some months' treatment.

The next admission was April 18, 1890. Temperature 97.2, urine sp. gr. 1010, acid, trace of albumen; amount passed on three successive days was 56, 82, and 64 ounces

respectively. Pulse 120. She complained of the return of her old chest symptoms, which she attributed to bronchitis, and stated that the present attack had lasted for a fortnight. Examination of chest showed slight dulness on left side with weak breath sounds and scattered moist râles. On the right there were harsh breathing, dry rhonchi, and moist râles. She complained of a feeling of tightness in chest over the xiphoid cartilage. Further examination revealed a slight bulging forward of the second and third ribs on the left side close to the junction of the ribs and costal cartilages. No dulness or bruit could be detected over that area. There was accentuation, however, of the second aortic sound, dyspnoea, and pulsation in the suprasternal notch, together with slight inequality of pupils. These symptoms led to the suspicion of thoracic aneurism, but no exact diagnosis was arrived at. Patient was confined to bed and treated with ipecac. and squills, digitalis, and iodide of potassium.

On May 21st a few dry râles were noted in both lungs. On July 4th patient was seized with sudden and violent dyspnoea. Respiration 40, pulse 120, temperature 100 deg. She vomited and complained of great and persistent epigastric pain, and marked dulness was found over the left base of lung. There was slight cough with scanty sputa, and next day she vomited a small quantity of blood. The symptoms continued unrelieved in spite of free use of morphia and antispasmodics. Severe headache was complained of before death, and the epigastric pain persisted to the end. Patient died July 5th, about thirty hours after the commencement of the attack of dyspnoea.

*Post-mortem* showed a double aneurism of the descending thoracic aorta, causing a bulging to the left in the upper part, and another to the right, almost immediately below. The inner coats were ruptured, and a dissecting aneurism formed, which in both cases was adherent to, and had deeply eroded, the adjacent vertebræ. Both lungs were much congested, the heart was normal, liver pale and somewhat tough, weighing 2 lbs. 13 oz., kidneys congested, right weighed 4 ozs. and left. 4½.—*Eng. Med. Press*, Jan. 20, 1892.

*Remarks.*—There are several points of interest in the above cases. In the first, notwithstanding the extent and advanced

nature of pressure lesions, and the further fact that the patient underwent frequent examinations during her stay in the wards, which covered a period of seventeen months, yet it was impossible to arrive at a definite diagnosis of aneurism. The sudden and violent dyspnoea which set in two days before death appears to have been due to an increase of pressure on the bronchi. At the same time the patient complained of agonizing pain, which was fully accounted for by the deep vertebral erosion. It is somewhat curious, however, that pain should not have become a pronounced symptom at an earlier date. The second case illustrates the sudden termination of aneurism by internal rupture, and the fact that a man could be suffering from so large a thoracic tumor with such slight symptoms is worthy of note. The clot in the sac lay beneath that part which was grasped by the diaphragm, and showed a very noteworthy effort of nature to heal the lesion. Had it been possible to apply pressure in a like way to the upper part of the sac it would probably have become filled altogether with firm clot.—*Eng. Med. Press*, Jan. 20, 1892.

**Molson (J. E.) on Diagnosis of Aneurism of the Descending Thoracic Aorta.**—The writer gives in full the histories of two cases which have come under his own observation, together with notes on several others recorded at the Middlesex Hospital. He finds very little information on the diagnosis of this peculiar condition. The cases are rare. Only ten are recorded in 2,982 post-mortem examinations. So it has occurred once in 298 or 0.33 per cent. of a general hospital's post-mortem examinations.

Of these ten cases eight were males, the average age being forty-four and a half years. There was nothing special observed as to any particular occupations predisposing to the disease.

There was nothing to point to lead poisoning occurring in any of these cases, and in only one was there distinct mention of high tension of the vessels and evidence of Bright's disease.

In none of the cases was any history of syphilis given, nor that any signs of it were found; though in only two was it distinctly negatived.

Now taking some of the common signs of thoracic aneurism, as differences in the radial pulses of the two arms, or in the

size of the two pupils, or paralysis of the vocal cords, all these we should expect to be wanting in an aneurism confined to the descending portion of the aorta. This seems to be exactly the case. Two of the cases tend to prove this point: aneurism being diagnosed with different-sized pupils, a paralyzed vocal cord, hoarseness, and brassy cough, but in each a dilated arch was found which probably alone accounted for the pupil and vocal-cord signs. If the aneurism has extended and become superficial with obvious dulness, tumor, and pulsation, we only have, then, signs and symptoms common to all thoracic aneurisms, and they need not be considered separately in our present subject, except to mention that, if the bulging be backwards, erosion of the bodies of the dorsal vertebræ occurs without angular curvature, as in Pott's disease, and with no pain or only slight indefinite pain.

Now, to consider the signs that may occur and in an advanced state probably do more or less occur: interference with the expansion of the left side, together with weaker breath sounds and diminished vocal fremitus and vocal resonance, and perhaps sonorous and sibilant rhonchi, occasionally increased dulness of base of lung,—these signs are often found in cases already by other means diagnosed as aneurism, but to diagnose an aneurism by these means alone would seem rash and not justifiable.

The two most trustworthy signs are cough and pain in the left side and between the shoulders. Molson concludes as follows:

*Firstly*, pain and a cough brassy and laryngeal are the earliest and most reliable signs of a descending thoracic aneurism. Dyspnoea, palpitation, and stridor may occur with, perhaps, weakened breathing, diminished vocal fremitus and vocal resonance, and sonorous and sibilant rhonchi occasionally.

These appear to be the only early signs peculiar to this kind of aneurism. When the case is advanced, and we get superficial dulness, tumor, and pulsation, any refinements are no longer required.

*Secondly*, that aneurism of the descending thoracic aorta cannot be diagnosed in an early stage with our present means of investigation. — *Montreal Med. Four.*, March, 1892.

**White (H.) on Patent Ventricular Septum together with an Aneurism of the Base of the Aorta Opening**

**into the Right Ventricle.**—W. showed, at a recent meeting of the London Pathological Society, a specimen taken from a boy, aged fifteen, who had never had rheumatic fever, and who had been quite well till four months before admission, when, apparently following on influenza, he had become short of breath and œdematous. On admission he had all the signs of backward pressure. The cardiac dulness was increased, over the whole of the chest there could be heard a very loud rasping to-and-fro sound, closely simulating pericardial rub. This was also audible behind, especially at the left apex. Its point of maximum intensity was in front over the sternum, opposite the third interspace. At the post-mortem examination the heart was not particularly hypertrophied, at the upper part of the septum ventriculorum was an aperture between the two ventricles, and behind the right anterior aortic valve was a small aneurism which had burst into the right ventricle. Judging by the friction patches in the right ventricle, it appeared that the blood had flowed both from the left ventricle, and from the aorta into the right ventricle. — *Brit. Med. Four.*, May 21, 1892.

**Hanford (H.) on Anæmia as a Cause of Permanent Heart Lesion.**—This question involves an answer to the three following inquiries:

1. The proportion of cases of anæmia in which recognizable dilatation is found?
2. The relative affection of the right and left ventricles?
3. Whether anæmia alone is a sufficient cause of cardiac dilatation? And if not, what are the contributing causes?

With regard to the first, I have already expressed my conviction that cardiac dilatation occurs in the great majority of cases of severe simple anæmia, and it forms by far the most important complication to which they are liable.

And in the second place I have given grounds for believing that the right ventricle is generally more affected than the left.

But the third question requires a fuller answer.

I have referred to what I have termed "gastric cases of anæmia," and to others arising from various causes, but entailing confinement to bed from the commencement, in which no murmurs and no dilatation could be detected.

The causes contributing to the dilatation are many, but the two chief are high vascular tension, which may arise from various conditions and exertions.

Dilatation from over-exertion, whether sudden or long continued, is well recognized; but I do not refer to what would ordinarily be termed over-exertion.

The late Dr. Sibson showed that heart affections were far more frequent, as complications of acute rheumatism, among young women who had been exposed to the laborious work of domestic service, than among females generally of the same age who had not been so exposed. In many of these cases it is probable that the mitral systolic murmur observed was due to dilatation rather than endocarditis.

As the result of much observation, I have become convinced that great care is necessary in protecting the patient against any exertion which causes breathlessness until the anæmia is thoroughly repaired.

If the importance of anæmic fatty degeneration of the heart is recognized, the ease with which very slight exertion may cause dilatation will be understood. And when with the degeneration the general loss of "tone" and contractile power is appreciated, we shall see the unreasonableness of supposing that the dilatation is gone and the heart completely rehabilitated, because after a fortnight or three weeks' treatment by iron, etc., the murmurs have disappeared *in the upright position*.

Anæmic dilatation, like all other forms, is due to increased peripheral resistance or diminished contractile power of the heart, or both, together with undue distensibility of the ventricles. In no other form of dilatation is such speedy restitution assumed, and there is no sufficient ground for assuming it in anæmic dilatation.

The persistence of a moderate or slight degree of dilatation is common, and is a frequent cause of the numerous relapses. The heart's apex remains displaced upwards and outwards, and for weeks or months the murmurs can be detected when the patient is recumbent. But occasionally the dilatation is sufficient to cause permanent mitral regurgitation. The mitral systolic is one of the least frequent of the so-called anæmic murmurs, but it is the most important, as it undoubtedly indicates regurgitation through the left auriculo ventricular orifice. It is

conducted towards the axilla like other mitral regurgitant murmurs. And, moreover, it is of all the anæmic murmurs the one most likely to remain permanently. Cases where the right ventricle remains dilated without the left are probably more frequent; but it is unusual for the dilatation to remain of sufficient degree to allow of the production of a regurgitant murmur in the upright position.

From these considerations it follows that rest and heart tonics, as well as aperients and iron, are of the greatest importance in the treatment of anæmia, especially during the first two or three weeks.—*Brit. Med. Journ.*, April 23, 1892.

#### Mudd (B. W.) on Ruptured Heart.

—J. W——, aged thirty-one, carman, was brought to me a few days ago, having been found lying at his horse's feet quite unconscious. He had been seen a minute or two previously standing at the heads of the horses, ready to back his van into a shed. The men who brought him said they thought the pole of the van must have struck him on the chest, but of course this was mere supposition, as nobody had seen him fall. On admission, half an hour after being picked up, I found him quite unconscious, voluntary motion being absent. He was extremely blanched; pupils widely dilated, and showed no reaction to light; pulse hardly perceptible; perspiration profuse. In this condition he remained for nearly an hour when he began to show signs of slight consciousness. I asked him if he had any pain; he understood me, and put his hand to his chest. About a quarter of an hour later he vomited a little blood, and expired shortly afterwards. He lived two hours from the time he was picked up.

*Necropsy.*—Externally there was a slight abrasion over the centre of the sternum; with this exception there were no other injuries on the body. On opening the chest the pericardium was distended, and on opening it I found it contained a quantity of uncoagulated blood. This I carefully removed, and then I could see that blood was oozing from the right auricle. On further examination I found that there was a laceration situated just between the auricular appendix and the commencement of the superior vena cava, measuring in length about a quarter of an inch and an eighth in breadth. The heart was slightly undersized and its muscular

tissue was pale, while on the surface there was an undue amount of fatty deposit. This case, I have no doubt, was traumatic, although there is very little to prove it. With the exception of the abrasion over the sternum there were no other signs of injury. I am inclined to think that the condition of the heart predisposed to the lesion, as the accident which caused it could not have been severe, otherwise there would have been contusion and injury to external structures.—*London Lancet*, March 12, 1892.

**Leigh (C. W.) on an Unique Case of Rickets with Synchronous Heart-Constrictions and Inspiratory Acts, each 54 per Minute.**—The patient, a male child, two years and two months old, suffered, as the mother stated, with shortness of breath; it was not disposed to play or exercise; it was mentally somewhat dull, although possessing a bright, intelligent face. It was easily frightened, did not have much appetite, drank water liberally during the night, and after doing so frequently coughed severely and then vomited. He had been constipated since birth, and had a habit of scratching or picking his nose; he had also cold sweats, and worried and cried during the nighttime. In the third month of his life umbilical hernia appeared, which had about disappeared at the time of the first examination.

The child, on examination, presented a typical rachitic condition.

The apex-beat of the heart could be felt at the lower border of the tenth rib and a half inch to the left of the nipple. The heart boundaries were: upon the right side, the inner border of the sternum; superiorly, the fourth intercostal space; and externally, the mammillary line. The tricuspid sound of the heart was absolutely normal and distinct; the mitral was also normal, but not so distinct; the aortic could not be heard on account of the exaggerated respiratory murmur. The pulmonary second sound only could be heard. There were no heart-murmurs. The pulse was 54 per minute.

Normal bronchial breathing could be heard over the entire chest, except that it was exaggerated. The percussion note was normal. The respirations numbered 54 per minute.

The spleen seemed somewhat enlarged; however, the apparent enlargement may

have been due to downward displacement caused by chest constriction. The liver-dulness commenced at the sixth rib. There was no evidence of any pathologic condition of the kidneys.

The patient died in convulsions two years later.—*Phil. Med. News*, Feb. 20, 1892.

#### **Mackenzie on Venous Pulsation.**

—Before a recent meeting of the Manchester Medical Society M. gave a demonstration of a means of graphically recording pulsation in the veins, whereby the movement of the apex beat or carotid pulse could be employed to time the events occurring in the veins. The essential features in the method were the covering of the vein or other pulsating part with a small leaden funnel. This funnel was connected by an elastic tube with a tambour, the lever resting on which recorded the movements communicated by the vein on the smoked paper of a revolving cylinder on Dudgeon's sphygmograph. The veins of which the pulsations were recorded were mostly the internal jugular, but tracings were also shown from the axillary vein, the femoral vein, and from the liver. The conclusions arrived at from the consideration of a large number of cases were summarized as follows: Pulsation in the veins arises when from any cause dilatation of the right heart and great veins, with incompetency of the tricuspid and venous valves, takes place. While the auricle can vigorously contract, there is a wave synchronous in time with and caused by the auricular systole (auricular wave). When the dilatation of the heart and veins is moderate, the auricular wave is followed by a great depression synchronous with and caused by the auricular diastole (auricular depression). In most cases there is a wave produced by and synchronous with the latter portion of the ventricular contraction (ventricular wave). The greater the incompetence of the tricuspid valve and the greater distention of the auricle, the earlier does the ventricular wave appear, and the larger space of time it occupies. The ventricular wave, in cases of extreme dilatation of the right heart, may occupy the whole period of ventricular systole; the depression caused by the auricular diastole is then replaced by the ventricular wave. In such rare cases the auricle has ceased to contract independently, or its contraction is repre-

sented by a very small wave preceding the ventricular wave. The great depression then shown in tracings of the venous pulse is caused by and synchronous with the ventricular diastole (ventricular depression.)—*Lancet*, April 9, 1892.

**Jacobi (M. Putnam) on Functional Disturbances of the Heart and Pulse.**

—In a paper read before the New York Academy of Medicine an exposition was given of such alterations of the pulse as could be demonstrated by means of the sphygmograph, apart from digital exploration. The author made a brief analysis of the characters of the sphygmographic trace, and emphasized two details—namely, the ætiology of the dicrotic wave, and the factors of the primary wave, which was completed by the systole, or retreat of the artery after expansion. It was pointed out that the entire trace was the product of two factors: 1, the pulse wave, transmitted from the shock of the cardiac systole; and 2, the movement of translation of the mass of blood ejected by this systole. This movement had about one eighteenth the velocity of the pulse wave. It had to be taken into account as modifying the pulse wave, because it encountered varying degrees of resistance at the periphery of the circulatory system, and these variations greatly changed the character of the pulse.

The dicrotic wave was originally considered by Marey as a centrifugal wave—i.e., as travelling in the same direction as the primary wave, and caused by a rebound of the blood column from the aortic valves with whose closure the dicrotic wave coincided. At the present day, however, many authorities held that the dicrotic wave was a rebound from the periphery—i.e., from the arterioles and capillaries—and thus travelled centripetally, or in a direction opposite to that of the primary wave. There were many reasons in favor of this latter view.

The retreat or systole of the artery which completed the primary wave of the pulse tracing was habitually referred exclusively to the elastic recoil of the previously distended artery. Dr. Lawrason, of New Orleans, had advanced the opinion that the artery did not merely recoil in virtue of its elasticity but also actively contracted upon the blood mass; that the more vigorous this contraction, the more nearly the artery would have assumed its original position before the arrival of the

dicrotic wave; hence the more the latter could be developed. Marked dicrotism, therefore was not to be regarded simply as an evidence of low tension, but of vigorous peripheric systole in the artery. This theory had not yet been demonstrated, but it was worthy of consideration. A large number of sphygmograms was exhibited illustrating the various propositions of the paper.—*N. Y. Med. Jour.*, Dec. 26, 1891.

**Cushing (W. R.) on Embolism of Femoral Artery Complicating Typhoid Fever; Gangrene; Death.**

—The case, occurring in February, 1891, and death resulting late in April, was that of a young colored woman about twenty-eight years of age. Her husband had been ill for several weeks with typhoid fever, and she had been his nurse. The case with her seemed to be rather mild in type—the continued fever, day after day, loss of appetite, and prostration, being the main features. There was a constipated tendency most of the time, and but little, if any tympanites. There was nothing that demanded special attention until about the second or third week, when her mother told me that since the day before her left leg had been very painful, and it was then cold and clammy. That morning I found there was unusual depression, especially of circulation; a slow, weak pulse, and sub-normal temperature. As regards the leg, it was cold and pulseless. The pulse could be felt in the groin, but none below the origin of the profunda, as nearly as I could locate it. After-history showed conclusively that the obstruction occurred at that point, entirely occluding the main femoral, and partially closing the profunda. Of course I applied artificial heat, gave musk, morphia, etc., but there was no re-action whatever in the limb; collateral circulation was not sufficient to sustain the parts at all below the knee. As a result, gangrene followed; a line of demarkation formed posteriorly a little above the knee-joint, and anteriorly extending almost to the upper third of the thigh. It ran its regular course; sloughing finally took place, and after nearly two months (at least six weeks) a diarrhœa set in, and she died of exhaustion.—*Va. Med. Month.*, March, 1892.

**Whitehead (R. H.) on Œsophageal Obstruction; Treatment by Artificial Digestion.**—A colored girl, nine years old, while eating beefsteak suddenly choked with pain in the throat and in



ability to swallow. She was first seen by the writer six days later. He continues her history as follows: The child was greatly emaciated, and her desire for water and food amounted almost to mania, but yet unable to swallow anything without its being instantly regurgitated. Rectal injections of milk had been employed, but their use abandoned on account of irritability of the rectum.

As there was some difficulty of breathing, examination was made first with the finger and then with the laryngoscope, but nothing could be detected. Then a probang was introduced with much difficulty owing to the struggles of the child and the sensitiveness of her throat. An obstruction was encountered at a point judged to be behind the left bronchus; but after using as much force as was deemed justifiable, it could not be pushed on to the stomach. It then occurred to me that the beef might be digested *in situ* by the use of pepsin and hydrochloric acid, provided a sufficient quantity could be kept in contact with it. Having first ascertained that about 20 drops of fluid was the largest quantity the girl could swallow without regurgitation, she was directed to take 15 drops of pepsin cordial and 5 drops of dilute hydrochloric acid every ten minutes. I watched her very carefully, and the directions were faithfully followed. After three or four doses were taken the quantity accumulated would be regurgitated. After five hours of this she threw up a piece of cartilage about the size of the last phalanx of the little finger, but was still unable to swallow. After two more hours, however, she could swallow with ease and speedily recovered. It is possible, of course, that the mass was carried down into the stomach spontaneously by the contractions of the œsophagus, or that the beef was disintegrated by decomposition. However, neither of these suppositions seems probable, as there was no foetid odor about the cartilage, and the shreds of tissue clinging to it showed the action of a solvent.

Should a similar case ever occur in my practice again, I should feel inclined to first attempt to anesthetize the œsophagus with cocaine, in the hope that thus a larger quantity of the solution might be retained for a longer time.—*No. Carolina Med. Journ.*, Feb., 1892.

**Todd (C. E.) on a Case of Cholecystotomy with very large Stones.—**

Mrs. W., æt. sixty-four years, had had symptoms pointing to gall-stone colic for upwards of thirty-three years. She suffered about every two or three months from acute agony in the pit of her stomach. The pain came on suddenly, lasted generally about twenty-four hours and then disappeared, leaving her jaundiced and weak. These acute symptoms were followed by the passage of light-colored stools and bilious urine. I had myself attended her during a great many of these attacks, and had diagnosed gall-stones as their cause; but I never found any stones in her motions, nor could I until just before the operation detect any swelling in the region of the gall-bladder. I had repeatedly suggested the advisability of removing the stones by abdominal section, but it was not until her last attack that I felt justified in strongly pressing an operation. On examining her then I found a tender swelling in the right hypochondrium, measuring four inches from above downwards, and two across. She had then a temperature of 101° F., had lost flesh a good deal, and was jaundiced.

Accordingly, I made an incision four inches in length over the swelling, verified the diagnosis of gall-stones by puncture with an aspirating needle, and sewed the gall-bladder to the peritoneum and deeper parts of the wound. When the stitches were put in there was an area of gall-bladder exposed of about three inches in circumference. The bladder being opened, pus and bile escaped, and the orifice was blocked by a stone so large that it was quite impossible to deliver it through the external wound. Ultimately was I able with some difficulty to break up the stone with a needle and strong forceps, and to remove it piecemeal. When the first was removed there was a second stone of almost equal size, which had to be dealt with in the same way. A large drainage tube was inserted and the wound dressed with oakum. The patient rallied well from the operation, and the discharge of bile was so profuse that the dressings had to be changed every three hours. The temperature never rose; the external discharge of bile nearly ceased, and the jaundice disappeared. Everything seemed to be going on well when suddenly, on the morning of the seventh day, the patient became collapsed and died. I believe that calculi so big as these are rarely found in

the gall-bladder, although I have often seen numerous small ones. The question of operation in gall-stone cases is a very difficult one to decide. The surgical undertaking is a dangerous one, and although the stones as they pass produce extreme agony they are only very rarely a cause of death. Moreover, symptoms after lasting for months occasionally clear up for years, and even never give further trouble.

When, however, the jaundice and pain are persistent, and the general health is suffering in a marked degree there can, I think, be no question as to the necessity of removing the stones by external incision. The diagnosis, too, is often a matter of difficulty. Quite recently I had a case pointing very strongly to gall-stones, but on opening the abdomen nothing unusual was found. I have seen this happen in the practice of other surgeons. By a careful attention to the history of the case, more especially if a tumor is present, a diagnosis justifying operation, if need be, can as a rule be made.—*Australasian Med. Gazette*, December, 1891.

#### Herrick (J. B.) on Medical Diagnosis of Diseases of the Stomach.

1. The employment of the stomach tube for diagnostic purposes in private practice will be limited to cases chronic, long unimproved, or where there exists a suspicion of malignant growth.

2. A minimum amount of danger attends the use of the soft rubber tube.

3. Ewald's test-breakfast is the best for general use.

4. In the Günzburg's and Boas' tests we have a means very rarely failing of recognizing free hydrochloric acid.

5. Approximate quantitative tests can be made by these methods.

6. Exact quantitative methods are too intricate and prolonged for the general practitioner, and are rarely necessary of employment.

7. Uffelmann's test for lactic acid is simple and reliable.

8. The absorptive power of the stomach can be readily shown by the potassium iodide test.

9. No simple and thoroughly reliable test has yet been brought forward for the propulsive power of the stomach.

10. These tests should be regarded as confirmatory aids to diagnosis, and not employed to the exclusion of subjective symptoms, external physical examination, etc.

11. In all cases it should be ascertained, if possible, whether the stomach disease is primary or secondary to disease elsewhere.

12. In carcinoma ventriculi free hydrochloric acid is, in the great majority of cases, absent.

13. In ulcer it is usually found in excess.

14. Dilatation of the stomach can be diagnosed with greater certainty than formerly, by the use of the stomach tube.

15. The vague term "dyspepsia" is being replaced by more accurate terms based on perversion of gastric function, *e. g.*, hyperacidity, hypacidity, anacidity, hypersecretion. A knowledge of the underlying chemical perversion is of great value as a guide in therapy.

16. The examination of the stomach contents will often show that the complaint of the patient as to heaviness and fulness in the stomach, food lying for a long time in the stomach, etc., is unfounded, *i. e.*, that the disease is neuropathic in character.—*Chicago Med. Recorder*, Feb., 1892.

Jollye (F. W.) Hepatic Cirrhosis in Children.—The author analyzes the various statements made by writers on this affection and concludes:

1. That alcohol, syphilis, tuberculosis, and malaria account for fifty per cent. of them, the other most frequent causes being probably the exanthemata and errors in diet.

2. That acute interstitial hepatitis is frequently found microscopically after the infectious fevers, especially after measles and scarlet fever, but the part played by the disease, alcohol, and diet respectively in those cases which afterwards become examples of cirrhosis, is an open question, as is also the reason why some livers are affected with the hypertrophic and others with the simpler form.

3. That the symptoms may be wholly referable to the nervous system, the relation of the pathological changes in the liver to those in the brain being undetermined.

4. That severe pyrexia, quick pulse, and increased frequency of the respirations, are frequent symptoms, and may make the diagnosis difficult from tuberculosis, typhoid, and other fevers.

5. That the symptoms of failing health in children, with no marked adequate cause, especially if associated with epistaxis or other hæmorrhages, the development of nævoid growths, or the occasional presence of jaundice, should lead us to examine the liver for signs of cirrhosis.

6. That the later symptoms depend upon the canal system of the liver chiefly involved, or whether the parenchyma chiefly suffers.

7. That nearly half the cases occur between the seventh and thirteenth years, and that males are nearly twice as frequently attacked as females.

8. That if all severe symptoms disappear under treatment, they will certainly reappear and end fatally within, at the outside, as far as we know at present, a period of three years.

9. That the best treatment appears to be a tonic one, combined with special treatment for special symptoms.

10. That some cases are part of a general disease due to some poison getting admission to the general circulation and especially attacking the liver, owing to the slow circulation in the hepatic capillaries, just as, no doubt, acute yellow atrophy is a general disease, the chief pathological change found *post-mortem* having caused it to be classified amongst the diseases of the liver.—*British Med. Four.*, April 23, 1892.

**Conant (W. M.) on a Case of Imperforate Rectum.**—The patient, male, three days old, had passed no feces since birth. The child had vomited frequently. The urine was passed freely, clear, and not tinged with meconium. Temperature at time of entrance 100°, pulse 100.

Examination showed the child to be much jaundiced. General condition fair, with pulse of good strength. Abdomen much distended, so that the veins could easily be seen. No anus present, not even a dimple to mark the accustomed spot. A doubtful impulse was felt in region of anus on pressure upon the abdomen.

Operation under ether. An incision was made from the middle of the perineum to tip of coccyx, and was carried to the depth of one and a half inches. Even then there was no impulse to be felt either by Dr. Beach or myself. A small trocar was plunged into the region of the rectum, but nothing was obtained. It was decided that it was not wise to deepen the incision, and on consultation it was thought best to do a laparotomy.

An incision two and a half inches long was made in the left linea semilunaris. Some ascitic fluid was found on opening the abdominal cavity. On inserting the finger the distended bowel was detected,

extending toward the perineal incision. It seemed to be about a quarter of an inch from the perineal incision, and separated from it by a diaphragmatic membrane which shut off the abdominal from the pelvic cavity. Then it occurred to me that it might be possible to pass a trocar through the perineal wound into the gut. This I was able to do by using one finger in the abdominal cavity as a guide. The point of the trocar held in the other hand was directed as far back as possible and then entered the bowel from behind without opening the peritoneal cavity. A good-sized trocar was passed into the gut, and five ounces of meconium passed through the canula. The abdominal wound was closed with silk sutures. The canula was left in perineal wound, being fastened in with adhesive plaster. The child stood the operation well, and slept in the afternoon. He took and retained milk and water when awake. Fæces passed readily through the canula, and the child was very comfortable in the evening. The patient made a good recovery, but succumbed to entero-colitis two months later.

This is the first case, as far as I can learn, that has had a laparotomy performed, and then had a connection made between the gut and the perineal wound without opening the intestines from above. Certainly one case does not prove anything, but the unfavorable condition of the child before the operation, and the great relief and slight shock from the operation, have led me to report this method of operating in severe cases of imperforate rectum and anus.—*Boston Med. and Surg. Four.*, March 24, 1892.

**Baruch (S.) on Pathognomonic Signs of Perforating Appendicitis.**—Symptoms of shock, carefully looked for, may always be found in perforating appendicitis. To recapitulate these—the countenance is anxious, the finger-tips, nose, and ears are cool; pulse and respiration are out of proportion to temperature the right inguinal region is very tender, the patient usually lies with the right leg drawn up. That these are pathognomonic signs my cases prove. Guided by them I opposed the views of an experienced physician in one case, insisting upon the operation; and in another did not approve the operation advised by an experienced surgeon. In both cases my reliance on these

pathognomonic signs proved useful to the patient.

The lesson of these cases, which are fortified by frequent reports of similar ones in our societies, is that when perforating appendicitis is diagnosed, either positively or probably, an immediate operation to remove the exciting cause is as imperative

as ligation of the vessel is in hemorrhage.

The fact that laparotomies are now constantly performed, under strict asepsis, with absolute safety, should induce the attendant to clear up a doubtful diagnosis of perforating appendicitis by an operation before septic peritonitis forbids it. *N. Y. Med. Record*, April 23, 1892.

## BOOK NOTICES.

**Atlas of Clinical Medicine.** By BYROM BRAMWELL, M.D., etc. Volume I., Part IV. Edinburgh: T. and A. Constable.

We have already outlined the plan on which this monumental work is constructed. Part IV. is in no wise behind its predecessors. The contents of this part are smallpox, a history of a remarkable case of globulinuria, three new cases of Friedrich's ataxia, cases of chronic insanity and bilious mania. Ten plates (folio) accompany the letter-press, illustrating smallpox and the cases of mania and melancholy. The first part of Vol. II. is promised for September 1, 1892. It is needless to praise either the artistic excellence of the plates or the high quality of the text. They are both beyond criticism.

J. E. N.

**The Diagnosis of Diseases of the Nervous System.** A manual for students and practitioners. By CHRISTIAN A. HERTER, M.D., Physician to the Class of Nervous Diseases Presbyterian Hospital Dispensary. G. P. Putnam's Sons, New York, 1892.

This is a handy little book which will prove of value to the general practitioner. It is written in a concise and clear style. The subject has been thoroughly discussed from a practical clinical standpoint, and is well up to date.

The various chapters are arranged as follows:

- I. The Structure and Functions of the Nervous System.
- II. The Symptomatology of Nervous Diseases.
- III. The Diagnosis of the Position of the Lesion.
- IV. The Diagnosis of the Nature of the Lesion.
- V. The Diagnosis of Clinical Types.
- VI. The Distinction of Functional and Organic Disease.
- VII. The Examination of the Patient.
- VIII. Illustrations of Diagnosis.

W. M. L.

**A Manual of Diseases of the Nervous System.**

By W. R. GOWER, M.D., F.R.C.P., F.R.S., Second Edition. Vol. I. P. Plakiston, Son, & Co., Philadelphia, 1892.

The first American edition of Dr. Gower's work was published in one large volume. The whole book has been thoroughly revised and many parts have been rewritten. These additions include new chapters on Multiple Neuritis (extending over 50 pages). Beri-beri, Brachial Neuritis, Senile Paraplegia, Morvan's Disease, and the Peroneal Type of Muscular Atrophy, as well as extensive additions to the account of the Functions of the Spinal Cord and the Symptoms of its Diseases, of Syringomyelia tumors, Muscular Dystrophy, Traumatic Lesions, etc.

The present volume contains 616 pages, and has a complete index. The second volume has been promised at an early date.

M. N. L.

**The Hydratic Treatment of Typhoid Fever.**

By CHR. SIHLER, M.D., Published by the author. Cleveland, Ohio. 12 mo., pp. 340.

The object of the writer is to clearly set forth the Brand method of using cold water in the treatment of typhoid fever. The details of this plan are set forth together with a full analysis of its many-sided physiological action. Illustrative cases are given together with the author's personal experience.

Nothing essentially new is contained in the book but it will serve as a safeguard to any one interested in the Brand method.

**Surgical Handicraft.** A manual of minor surgery and other matters connected with the work of house surgeons and surgical dressers. 300 illustrations. 8vo., pp. 594. New York: E. B. Treat & Co., 1892.

This is the first American from the third English edition of this practical work. Its scope is well expressed in its title. The section titles are as follows: Arrest of Hemorrhage, Apparatus for Restraint and Support, Fractures, Wounds, Ulcers, Burns, etc., etc. Wide margins with side headings facilitate reference. As would naturally be expected in a work of this kind, all discussion is avoided and everything considered from a purely practical standpoint. The book should be in the hands of every house surgeon.

J. E. D.

**A Practical Manual of Diseases of the Skin.**

By GEORGE H. RÖHE, M.D., Professor of Materia Medica, Therapeutics, and Hygiene, and formerly Professor of Dermatology in the College of Physicians and Surgeons, Baltimore, etc. Assisted by J. WILLIAMS LORD, A.B., M.D., Lecturer on Dermatology and Bandaging in the College of Physicians and Surgeons; Assistant Physician to the Skin Department in the Dispensary of Johns Hopkins Hospital. Philadelphia and London: The F. A. Davis Co., 1892.

The author states in the preface of this little volume that no attempt is made to add one more to the already numerous works for the dermatological specialist. Here little space is given to theoretical speculations upon pathology or etiology.

The book is carefully written and very clearly worded so as to be easily understood by the beginner in dermatological studies, but it falls far short of being of much value to any one treating skin diseases. It is doubtful if any practitioner in medicine would derive much practical benefit from the time spent in its perusal. Some of the formulæ given are of decided value, but many of them are old and could with advantage have their places filled with newer and more important prescriptions.

The chapters on Syphiloderma are well written and of decided merit being worthy of careful study.

C. W. C.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## EDITORIAL NOTICE.

The Editor takes pleasure in announcing that the department of contributions from the Continental medical journals,

will in the future be conducted by Dr. H. Solotaroff. He possesses special ability for this field of work which will hereafter be made a more prominent feature of the Epitome.

## LEADING ARTICLE.

### THE ETIOLOGY OF TYPHOID FEVER.

For many years the views of Murchison as to the nature of typhoid fever were accepted without question. He maintained that the disease was non-specific in its nature, and could not be ascribed to any one agent. For him the morbid agent lay in a peculiar decomposition liable to be set up in the dejecta of both healthy and typhoid cases alike, but far more commonly with the latter.

This theory passed for many years in lieu of a better one. It was not satisfactory, because it simply moved the solution of the real problem one step farther back. It did not get at the real cause. Then came the age of germs and Murchison's ideas were relegated to the background. The discovery of the germ of Eberth was hailed as the solution of the question, and until recently the medical world has rested content in this view.

But the world moves and medical ideas expand. The theory of to-day is accepted only tentatively—accepted only because it best explains the clinical facts of daily work. But there are with reference to typhoid fever, many facts that it does not explain. The pendulum of investigation is slowly receding and swinging back more slowly over the space so rapidly traversed during the past few years. It is especially interesting that so much discussion is current as to how germ-diseases so-called can arise—as they at times apparently do—*de novo*.

Years ago it was already taught that bacteria in general are just as much affected by their environment as are higher orders of life. Applying this principle to contagious diseases, it was asserted that certain germs ordinarily harmless may by bad air, improper hygiene on the part of man, etc., assume a deadly character, and that after these new attributes were assumed they were transmitted with no loss of virulence from culture to culture. Another advance step was taken when it was learned that with some diseases identical pathological changes could be produced by micro-organisms other than the ones typically associated with these same diseases.

It is along this line that certain researches have recently been made with reference to typhoid fever. In 1880 the germ of Eberth first asserted its claim to be the pathogenic factor in this malady. Eberth's claims were fully substantiated by Gaffky's work appearing four years later. In 1889 Rodet and Roux combated this view. Their contention was that the specific cause was the *bacillus coli communis*, a germ constantly found in healthy stools. The saprophytic properties of the latter had been admitted by Escherich as early as 1885. Two years later Hueppe claimed that it was pathogenic. Cases of typhoid too numerous to set aside have been now recorded, in which Eberth's germ was wanting, while the bacilli *coli communis* were present in large numbers.

As has been pointed out (*British Med. Four.*, June 11, 1892), in explanation of these apparently irreconcilable facts, it is of course possible that the two organisms—Eberth's bacillus and the bacillus coli communis—are simply varieties of the same species, and that they are not specifically different. The morphological differences between the two organisms are admittedly slight. No single character can be ascribed to the one, which is not found in the other; the most striking difference between the two is that the bacillus coli usually grows more luxuriantly on culture media than Eberth's bacillus. Other differences—morphological and cultural, capability of resisting temperature, etc.—have been described, but none of them are so constant as to be relied upon. Such being the case, it is not surprising that the view should be advanced, as has been done by Rodet and Roux, that the bacillus coli is the real typogenic agent, while Eberth's bacillus, formerly so regarded, is merely this organism modified in its passage through the body. They found it possible, in two cases of typhoid fever, to demonstrate by puncture of the spleen the presence of Eberth's bacillus in that organ at a time when the stools contained an almost pure culture of the bacillus coli, and no Eberth's bacilli.

The most recent work on the subject has followed along two lines. On the one hand, its tendency has been to show that Eberth's bacillus is not so commonly or so constantly met with in the stools of typhoid patients, or in water contaminated therewith, as has hitherto been supposed. A number of observers—Rodet and Roux, Vallet, and others—have examined the stools in different stages of the disease in a number of cases, and have found only the bacillus coli without Eberth's bacillus. In fact, it would appear that Eberth's bacillus is not infrequently absent from the stools of typhoid patients. When present at all it has usually been between the tenth and the twentieth day of the disease, at a time, namely, when Peyer's patches have commenced to ulcerate, and when sufficient time has elapsed to allow the bacillus coli to undergo the same modifications within these patches, as on the view above noted it is assumed to undergo in the spleen in being modified into Eberth's bacillus. On the other hand, it has become more and more probable that the bacillus

coli communis is capable, under certain circumstances, of acquiring definite pathogenic properties in man. Its presence has now been demonstrated, especially in a large number of suppurative lesions—abscesses, pleuritis, peritonitis, and the like, as well as in dysenteric conditions, cholera nostras, etc.

No allusion to this topic should overlook the recent work of Vallet (*Le Bacillus Coli Communis dans ses Rapports avec le Bacille d'Eberth et l'Étiologie de la Fièvre Typhoïde*, Paris, 1892). The results of this observer's experiments may be summarized by saying that both germs differ but little morphologically. Inoculation in animals gives practically the same results with both. The bacillus c.c., thrives in cesspools, even in cesspool fluids sterilized by filtration, while the bacillus E. does not. The former, taken from closets, is more virulent than that isolated from the healthy human bowel, and far more virulent than the latter. "In passing through the animal organism it appears to undergo certain modifications by which it approximates in its character to the bacillus of E." On the other hand, there is another side to the question of the etiology of typhoid fever, or rather the result, from test-tube investigations by no means cover all the phases of the problem. How complex this is has been well shown by Sir Charles A. Cameron in his recent Cavendish Lecture (*Brit. Med. Fourn.*, June 11, 1892). He there points out that the condition of soils and potable water has much to do with enteric fever. Infected water or milk can account for localized outbreaks, but widespread epidemics must be referred to more widely acting causes. Numerous observations are on record to show how rapidly microbes develop in soil water: hence the relation of bad sewerage to the growth of specific micro-organisms: hence also the necessity that every dwelling-place should have an air- and water-tight cellar bottom. These observations of Cameron do not at all militate against the germ theory, for in all unfavorable sanitary conditions we have just the environment which promotes germ growth in general and especially tends to give to germs—ordinarily harmless—virulent properties.

It may not be amiss to here allude to some interesting examinations of drinking-water made by Prof. Vaughan and reported at the recent meeting of the Association of American Physicians.

Some of the conclusions which have been reached in this study are as follows :

(1) Many of the germs found in drinking-water will not grow at the temperature of the human body. These germs, therefore, are not capable of inducing disease. It matters not how rich a given sample of water may be in these germs, if it contains no others it cannot be said that the water is a source of typhoid fever. The freedom of communities using such water from typhoid fever, seems to justify this conclusion. Such a water may not be, and certainly often is not, a desirable drinking-water. It may be turbid with suspended matter, unpleasant to the taste, and give off a disgusting odor, but there is no evidence that it can cause disease. Several interesting examples of this kind have come under observation.

(2) Of the germs that grow at 38° C. or at higher temperatures, some are fatal to animals when injected subcutaneously, while others are not. This renders a division of these into toxicogenic and non-toxicogenic germs possible.

(3) There is no proof that these non-toxicogenic germs can multiply in the animal body. Indeed, all the evidence which has been gathered so far goes to show that they not only fail to multiply in the bodies of the rat, mouse, guinea-pig, and rabbit, but some die when injected

under the skin or into the abdomen. However, this does not furnish positive evidence that they would not multiply in the body of man. For these reasons, waters containing these germs have not been positively condemned, though it has been advised in some cases that their use should be discontinued.

(4) Some of the toxicogenic germs found in drinking-water produce the same symptoms and the same post-mortem appearances in the above-mentioned animals as are observed after the employment of Eberth's germ. Moreover, their pathogenic (toxicogenic) properties, as tested upon these animals, are fully equal to those of Eberth's germ. They will not only live, but will multiply in the animal body. Waters containing these germs have in all cases been condemned.

(5) More than one germ obtained from drinking-water forms an invisible growth on potato.

(6) Several germs found in drinking-water will grow on the media prepared by Parietti, Uffellmann, and others, as means of recognition of the Eberth germ. About thirty of the germs found in these samples of drinking-water have been studied sufficiently to admit of their identification. Several of these differ from any which have been reported by other investigators.

## RECENT CONTRIBUTIONS TO FRENCH MEDICAL LITERATURE.

**De Montheyel on the Action of Somnol.**—As a result of extended experiments with this remedy the author concludes as follows :

1. Somnol has a bitter taste, and should be disguised in some syrup, especially when given to insane patients.

2. Its action on the digestive tract is evil. Disturbed conditions of the latter contra-indicate its use, as it will here cause indigestion, nausea, and even vomiting.

3. The immediate effect of its exhibition is to cause a psychic exaltation of a pleasurable nature. A mild intoxication may result without, however, headache or dulness.

4. In doses of from four to six grammes its excitant action speedily gives way to hypnotic effect, even in those who have no need of sleep. The latter is profound and

continuous, sometimes accompanied by dreams (especially erotic).

5. Somnol weakens, and may abolish the patellar reflex, generally unequally. Sensation is diminished, and complete anæsthesia may result. Muscular relaxation and weakness are induced. Vaso-motor relaxation is especially noticed in the face and over the trunk, with a sensation of warmth at the epigastrium. The effect on the temperature is a very slight elevation thereof.

6. Upon the respiration the effect is very weak. Upon the circulation, it is constant and energetic. All of these effects do not ordinarily last over two hours.

7. Somnol is a prompt and powerful diuretic, and has a distinctly stimulating action on the genito-spinal centres. It has no action on nutrition, and does not ac-

cumulate in the system.—*La France Médicale*, June 10, 1892.

**Lagrange on Subconjunctival Injections of Sublimate Solution 1-1,000.**—At a recent meeting of the Medical and Surgical Society of Bordeaux, Lagrange gave a brief account of two cases in which this method of treatment had been practised.

The first was that of a woman of thirty years, with a left specific iritis. Ordinary treatment vigorously carried on caused only a slight improvement. Adhesions were set up and a gumma formed on the iris. Lagrange then made two injections under cocaine of a 1-1,000 sublimate solution, the first time using six drops and again nine drops. These caused a speedy disappearance of the gummatous deposit, leaving only the adhesions.

The second case was that of a boy aged fourteen years, with left neuro-retinitis and right irido-choroiditis of long duration and from an unknown cause. Two injections were made of eight drops each. Five months later the patient was again seen. No improvement had taken place, and blindness was almost complete.—*Gaz. Heb. des Sci. Méd. de Bordeaux*, May 15, 1892.

**Trasbot on Pleurisy Occurring in Animals.**—In a recent communication to the Académie de Médecine, Trasbot states his views as follows:

1. Sero-fibrinous pleurisy in animals has ordinarily nothing to do with tuberculosis.
2. Most often its development can be traced directly to sudden exposure to cold.
3. It is impossible to regard it as an essential fever or as a periodical affection.
4. Antiphlogistic medication and derivatives, if applied early, exert a positively advantageous influence.
5. Thoracentesis can be practised without danger, and it should be practised before the effusion has become so great as to threaten asphyxia.—*La France Médicale*, June 3, 1892.

**On the Employment of Diuretin in Children.**—According to the observations of Demme, of Berne, diuretin is contra-indicated in all children below one year of age on account of the gastro-intestinal irritation which it so often provokes.

With children from two to five years the daily dosage is from 0.50 to 1.50 gr.; from six to ten years, from 1.50 to 3.50 gr. The remedy is agreeably given in sweetened

distilled water, with the addition of a little cognac. It may be continued for some weeks without losing its power and without any cumulative action.

In one case (child, ten years old), with amyloid visceral trouble of liver, spleen, and kidneys, with severe dropsy, six grammes in four days caused a general eruption, suggesting measles and a profuse diarrhoea.

In four cases of scarlatinal nephritis, with anasarca, a more rapid diuresis was obtained than with any other remedy. Three cases of mitral insufficiency, with scanty urine, showed no benefit with diuretin until compensation had been produced by digitalis. It then acted promptly. It appears to exercise a direct action upon the renal epithelium. Beyond this, there is no evidence that it has any effect on the circulation.—*Gaz. Méd. de Liège*, May 5, 1892.

**D'Aimé-Morelle on the Bacteriology of Cystitis.**—The writer has examined the urine of seventeen patients with cystitis. The urine was received directly from the urethra into sterilized tubes. His studies lead to the following conclusions:

1. In cystitis several varieties of micro-organisms are found.
2. With the exception of the tubercle bacillus, the most important are the staphylococcus and the streptococcus pyogenes and the bacillus described by Albarran and Hallé under the name of "*bacterie pyogene*."
3. In any given case of cystitis a variety or several may be found, but, as Roosing has shown, the number of varieties is limited (rarely more than three).
4. The staphylococcus and streptococcus pyogenes cause the purulent discharge. The urine is often alkaline, due to the influence of these germs on the urea, they changing it into ammonium carbonate.
5. The "*bacille pyogene*" of Albarran is the most important infectious agent of all. This organism does not attack urea. It leaves the urine acid, and can be borne a long time without causing any reaction. It is, in fact, none other than the "*bacillus lactis aërogenes*" (Escherich) met with in the stools of infants.

6. This latter germ, if injected into the urinary apparatus of dogs, causes constitutional troubles and the appearance of globules of pus in the urine, but these dis-



turbances are transitory, and disappear after a few days. The germs themselves continue to multiply, and are found in the bladder as well as in urine allowed to settle after expulsion.

7. It appears to be the cause of the gaseous urine sometimes observed in diabetics.—*Four. de Méd., Chir. et Pharm.*, May 7, 1892.

**Combemale and Brunelle on the Physiological Effects of Mono-Méthylamine.**—In this méthylamine one hydrogen atom of the ammonia radicle  $A$ ,  $H_3$  is replaced by a methyl radicle ( $CH_3$ ). The formula is therefore  $Ag\ H, CH_3$ . It is a gas which, a few degrees below zero, becomes a mobile liquid, with an ammoniacal odor. It condenses with the vapor of water in a very moist atmosphere. It is strongly alkaline, and gives off white fumes in presence of hydrochloric acid. It is the most soluble of all known gases.

The experiments were carried out on dogs. Various quantities were injected under the skin with fairly constant results, which may be summarized as follows:

1. The injection of the gas, in solution, under the skin causes phenomena of irritation, going on even to necrosis.
2. Internally after absorption there is a

tendency to hemorrhages, renal, pulmonary, cardiac, and intestinal. There are fluctuations of temperature, sialorrhœa, and albuminuria.

In order to avoid these effects, the solution should not be stronger than 1-200. The dose per kilo. of body-weight should not exceed 10 cgms. Above 15 cgms. death is sure to result.

These experiments are of interest only from a toxicological point of view, as the remedy has no known place in therapeutics.—*Bull. Méd. du Nord*, May 13, 1892.

**Chiais on Nutritive Troubles in Arterio-Sclerosis.**—This condition presents certain physical and chemical perversions of the nutritive functions. There is slow osmosis, imperfect elimination of fluids by the kidneys, irregular oxydation, imperfect metabolism, etc.

Treatment should be directed to each physiological perversion. Diet alone may suffice in some cases. If necessary, diuretic foods (fruits, etc.) or drugs can be added. If these fail, a milk diet must be prescribed, and rigidly adhered to. This regulates the oxydation of albuminoids, and restores the proper composition of the urine. Mineral waters of a diuretic nature find here a legitimate field.—*Nice Médical*, April, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY HENRY L. SHIVELY, M.D.

**Treves (Frederick) on the Treatment of Spinal and Other Tubercular Abscesses.**—An incision is made into the abscess at the most convenient spot, and, whenever possible, at the most dependent point. It should be so placed as to command all parts of the abscess, and to allow of access to its remotest quarters. It must be made through perfectly sound skin. The pus is allowed to escape, and the abscess cavity is then washed out with a hot solution of corrosive sublimate of the strength of 1 in 5000. For this purpose a Leiter's irrigator of the largest size, and suspended at a height of twelve feet, is convenient. Many gallons of the solution are required. When the fluid returns clear the fingers are introduced into the cavity, and the caseous semi-solid matter which exists in such quantity in these abscesses, and which is not wholly removed by flushing, can be dislodged. By means

of the fingers also septa in the cavity may be broken down, diverticula may be opened up, and by the aid of the finger nails a considerable quantity of the smooth slimy lining membrane of the abscess may be removed. Repeatedly the cavity is flushed out with the warm solution. The lining wall of the abscess is now carefully and thoroughly scraped with a Volkmann's spoon until the whole surface has been laid bare. Now and again the process is interrupted to allow of the cavity being once more flushed out so as to remove such débris as may have collected. After the scraping and flushing have been persevered with until all the lining membrane appears to have been removed there comes what I believe to be the most important part of the operation—the rubbing of the abscess wall with sponges, and the thorough drying of the cavity. T. uses small hard Turkey sponges in holders. The holders are

shaped like slender pressure forceps of the largest kind, and are about a foot in length. By means of the sponges the whole of the abscess wall is vigorously rubbed, and it is surprising what a quantity of inflammatory material in the form of the slimy lining membrane, and even cheesy pus, comes away upon these sponges. It is at once made evident that much that it is necessary to detach may escape the sharp spoon, and that the stream of water will only remove such matter as is quite free. The sponging process is tedious, but it leaves the cavity practically dry. The abscess cavity is now a raw space, almost comparable to that which would be left after the removal of a large and adherent tumor. If the proceeding has been successful, the great space should be free of all altered pus, and bared of all the lining membrane. In deep abscesses it cannot always be demonstrated that this has been done, but no pains should be spared in endeavoring to effect it. The operation may occupy more than sixty minutes when deeply placed abscesses in adults are being dealt with. The oozing of blood, which is at first considerable, soon ceases, and the last sponge used should be withdrawn practically unsoiled. The incision is now closed entirely with silk-worm-gut sutures. No antiseptic is introduced into the abscess cavity, and of course no drainage-tube is employed. A dressing of Tillmann's linen or cotton wool dusted with iodoform is applied, and, whenever possible, T. endeavors to obliterate the abscess cavity to some extent by suitably placed pads and pressure. Eight cases of permanent and complete cure are reported, in three of which the operation wound healed by first intention under a single dressing.—*London Lancet*, May 21, 1892.

**Denncé (M.) on the Treatment of Lateral Curvature of Adolescents.**—The author makes a vigorous protest against the mere mechanical treatment of these cases, and enters a strong plea for manual exercises by the surgeon conjoined with gymnastics. Rigidity of the spine when it exists is one of the principal obstacles to the correction of the scoliosis, and it must be first overcome by exercise, active and passive, applied directly to the seat of the deformity. Considerable force must be used, and the exercises should be prolonged to a point just short of fatiguing the patient and be frequently repeated. The patient is placed face down recumbent

upon a table and manual compression is made with one hand over the convexity of the curvature, while counter pressure is made with the other placed upon the opposite side. (At the New York Orthopædic Hospital and Dispensary the following method is employed. The patient with a primary right dorsal scoliosis is seated on a low stool in front of the surgeon, who, also seated, faces the back of the patient. His right hand is placed over the convexity of the dorsal curvature, his right elbow resting on the right knee. With the left hand grasping the chest below the patient's left shoulder, the spine is forcibly flexed to the right, the weight of the patient's body assisting the surgeon's right hand in making compression over the summit of the scoliosis. Under this treatment in a few weeks spinal rigidity is usually much reduced.—H. L. S.)

Vertical suspension from the head and shoulders is also recommended.

In summing up his objections to the corset and other apparatus usually worn, the writer states :

1. The patient, in whose disease debility is recognized as a principal course, is subjected to the additional weight of heavy apparatus.

2. They annul the action of the spinal muscles and increase the paresis and atrophy to which these muscles are so generally disposed.

3. The immobility to which they condemn the patient results in the more or less complete fixation of the curvatures, and renders it difficult to combat the rigidity of the spine.—*Revue d'Orthopédie*, May, 1892.

**Longuet (L.) on the Pathology of Congenital Talipes Equino-Varus.**

—The author's conclusions are based upon careful dissections in three cases. He finds the skin adherent on the inner border of the foot, the plantar fascia tense and shortened, and the subcutaneous fat more abundant than on the unaffected side. The muscles in each case were normal in number and in their insertions, but the following were shortened, their tendons contracted, their fibres pale or yellowish, and bulk, as compared with the healthy side, diminished: tibialis anticus and posticus, Extensor Proprius Pollicis, and extensor communis digitorum. The tendo Achillis is strongly contracted. Of the bones the astragalus is most deformed. It is twisted

on its antero-posterior axis, and its neck is strongly bent inward. The os calcis is elongated antero-posteriorly, flattened transversely, and curved in such a way that its external surface is convex and its inner concave. In two of the cases examined the tubercle of origin of the abductor minimi digiti was wanting. The scaphoid and cuboid were irregular and cartilaginous, the latter without the groove on its under surface for the peroneus longus. The three cuneiforms were irregular and not so far advanced in ossification as the corresponding bones of the healthy foot. The metatarsus was but little changed; all the bones were swollen and less developed than on the sound side. — *Revue d'Orthopédie*, May, 1892.

**Goldthwait (J. E.) on Forcible Strengthening for Permanent Flexion of the Knee.**—The case reported is one of ankylosis and subluxation of the tibia due to gonorrhœal rheumatism. The dislocation was reduced by Bradford's genu-clast, an instrument consisting of two lateral uprights extending from below the ankle to above the knee, provided with a knee-cap and screw-pad to force the upper extremity of the tibia forward, the apparatus being attached to the limb by two straps just above the ankle. After the operation the patient made a rapid recovery, there was entire freedom from pain, and he now has a useful limb.

**Gibney (V. P.) on Indications for Operative Interference in Orthopædic Surgery.**—Corrections of deformity in early cases of hip-joint disease by manual force under ether anæsthesia or by division of muscles and tendons is indicated if the correction is difficult, and in advanced cases where the disease is fully arrested osteotomy below the trochanter minor is a valuable addition to the therapeutics. With regard to abscesses, incision is urged if four or five aspirations fail to relieve. Old sinuses and pockets of pus should be treated by operative interference. Operation in spinal disease is not recommended except where a severe trauma has fractured the lamina, and where pressure has resulted. In these cases laminectomy is advised, but in many cases the ordinary mechanical treatment proves of valuable service. In disease of the knee partial arthrectomy is better than complete arthrectomy or excision, especially in children. In the internal derangements of the knee operative interference is

advised, rather than the prolonged use of apparatus and fixation splints. In synovial disease alone an occasional aspiration of the joint with strapping is good practice. — *N. Y. Med. Jour.*, May 28, 1892.

**Von Hook (Willer) on Lowenstein's Method of Opening the Ankle-Joint.**—The author reports a successful case of tubercular arthritis of the ankle thus treated. The method is as follows:

"While the foot rests on its inner surface a longitudinal incision is first made along the middle of the lower end of the fibula, beginning where the bone comes out between the bellies of the peroneus tertius and brevis muscles, and carried to the external malleolus. From this point the incision curves forward with a long radius to terminate near the calcaneo-scaphoid joint, over the head of the extensor brevis digitorum, close to the tendon of the peroneus tertius. From this incision the skin is dissected so far forward and backward that the fibula and the external surface of the anterior pocket of the tibio-tarsal joint are exposed. At the posterior border of the fibula the fascia is split and the sheath of the peroneal tendons exposed. Now, at the posterior border of the fibula the fascia is opened and while blunt hooks are drawing backward the peroneal tendons, the soft parts of the back of the leg are separated, by a few touches of the knife as far upward as the incision extends, from the periosteum of the tibia and fibula and as far inward as the middle of their superficial extent. Next the fascia is similarly incised along the anterior border of the fibula, and the ankle-joint opened in front of the external malleolus. Now, the separation of the soft parts, including the capsule of the anterior surface, is carried out in the same way as it was behind, while a blunt retractor, placed over the lateral border of the peroneus tertius, draws forward the extensor apparatus. Then the incision in front of the external malleolus in the soft part is deepened in the direction of the neck of the astragalus, and after division of the ligamentum cruciatum and incision of the soft parts covering the neck of the astragalus, the external wall of the anterior joint pocket is opened. When, by going around the inner surface of the external malleolus with a small knife, the ligaments are divided which unite them behind with the calcaneum and posteriorly and anteriorly with

the astragalus (an act which can be facilitated by making gentle pressure on the external border of the foot in pronation), one can easily succeed by inwardly rotating the foot, held in the equinus position, in prying the head of the astragalus over the malleolus internus as a posterior fulcrum out of the mortice of the leg bones, and by further supination in so placing the foot that, with the sole lying near to and behind the malleolus internus, whose ligamentous connections have been retained, the upper surface of the astragalus lies in one and the same plane with the cartilaginous surface of the tibia and fibula."—*No. Am. Pract.*, May, 1892.

**Gendron (D. F.) on the Orthopædic Treatment of Congenital Dislocation of the Hip.**—The author divides these dislocations of the hip into three distinct classes as they are presented for treatment: (1) those in which there is merely an abnormal laxity of the joint which permits the head of the femur to escape from the acetabulum by rupturing the capsule; (2) cases in which the normal relations of the joint no longer exist, the articular end of the femur, having entirely escaped from the acetabulum, lying upon the dorsum ilii adjacent to the articular cavity; (3) a more pronounced set of

cases in which the head of the bone lies at a considerable distance in the external iliac fossa, and is more or less immobilized in its new situation.

Only the first two classes are amenable to mechanical treatment. The author employs an ingenious apparatus consisting of a corset and screw-pad which makes firm pressure above the trochanter major after reduction of the dislocation. Attached to the upper margin of the pad plate is a vertical upright extending to the axilla, terminating in a crutch which is extensible, and has attached to it shoulder straps which are carried over the back and buckled below to the corset. By a joint at the lower margin of the pad plate is attached an external weight-bearing bar which is adjustable as to its length, provided with knee- and ankle-joints and attached below to the sole of the shoe. There is also a broad laced thigh-band and narrow calf-band by which the apparatus is firmly screwed to the thigh and leg. The whole contrivance relieves the hip of the greater part of the superincumbent body weight, and holds the head of the femur firmly in its corrected position.—*Gazette Hebdomadaire des Sciences Médicales de Bordeaux*, April 11, 1892.

## REPORT ON NERVOUS DISEASES.

BY WM. M. LESZYNSKY, M.D.

### Church (Archibald) on Athetosis.—

This is a clinical report of three cases. The writer concludes that, "regarding treatment, there is medically very little that can be done. Hyoscyamus, cannabis indica, gelseminum, and similar sedatives will reduce and temporarily modify the movements, but disturb the general health, and their withdrawal is promptly followed by a full recurrence of the original state. Surgical measures have been advocated by some, and Horsely goes to the extreme of recommending that every case of athetosis should be operated upon and the related cortical centres removed. He certainly did not have the double form in mind when giving this advice. Where, however, the athetosis, as in Case I., is practically limited to a few muscles, the proposition may be considered. Such decortication, of course, produces paralysis in the member which

may or may not be preferable, and few patients would willingly accept the exchange. If the hope and probability of a return of voluntary power in the hand should be well founded, from the vicarious control of associated or symmetrical cerebral centres, a great gain and practical cure would result. To attack the basal lesion is of course impossible. The procedure of Hammond in stretching the peripheral nerves, though it gave some relief for a few months each time in his first case, as reported by him, can not be reasonably recommended."—*Selected*.

**Ransom (W. B.) On a Case of Cerebral Abscess; Operation; Recovery.**—The following case was reported at a meeting of the Nottingham Medico-Chirurgical Society: A man had a discharge from the left ear for thirty years. This suddenly diminished, the ear became

painful, and there followed a rigor, some delirium, and some deafness in the right ear. The patient was dull and apathetic, but could answer questions. No marked pain, no cephalic tenderness, no fever. Deaf on both sides; slight left optic neuritis. The mastoid process was trephined; the bone was much sclerosed, and neither air-cells nor pus was discovered.

His condition having become decidedly worse, the temporo-sphenoidal lobe was explored through a trephine opening, and at the depth of an inch pus was reached. About one and a half ounces were evacuated, and the cavity irrigated with 1-2,000 bichloride solution.

Rapid improvement took place, the wound healed satisfactorily, and he was discharged from the hospital five weeks after the operation.—*British Med. Jour.*, April 23, 1892.

**Tubby (A. H.) on the Treatment of Compression Paraplegia following Potts' Disease.**—The writer prefers the conservative method of treatment. In referring to the surgical operation of "laminectomy" he considers the term improper, and better replaced by "rachiotomy." He would recommend the rest and extension method, in which there are still indications that the spinal cord is not hopelessly disorganized, such indications being retention of slight movement in a limb or slight sensation, partial control over bladder or rectum or reflexes not markedly exaggerated or lost, any one of which symptom will be present in by far the majority of cases. Or, secondly, those in which the temperature is normal, pointing to no large collection of pus requiring no immediate evacuation. Even if fever be present, it must be carefully ascertained that it is due to abscesses in connection with the spine, and not to an outbreak of tubercle elsewhere. And, thirdly, the conservative method should be recommended to those who can command the care and attention incidental to such a long course of treatment.—*The Medical Press and Circular*, April 13, 1892.

**Obersteiner on the Relations between Syphilis and Dementia Paralytica.**—In a recent lecture upon this subject Prof. Obersteiner concludes that it is perfectly clear that dementia paralytica has a very close relationship to syphilis, seeing that the latter disease occurs ten times more frequently in conjunction with demen-

tia paralytica than in any other form of psychosis, but this association does not prove that syphilis is the cause of the disease, although individually associated. Syphilis is known to weaken the system, and lower the vitality, greatly reducing the resistance. Another point to be observed in the coincidence is the similarity in the anatomical conditions of progressive paralysis and syphilis, which serve to add further complication to the morbid connection.—*Medical Press and Circular*, April 13, 1892.

**Walton (G. L.), and Vickery (H. F.) on Chorea and its Connection with Rheumatism and Heart Disease.**—

This article represents a careful analysis of 76 cases seen in conjunction by the authors during the past two years at the Massachusetts General Hospital. In these 76 cases 36 were found to have no possible history of rheumatism, and no question of cardiac disease, either functional or organic,—that is, 47.37 per cent. There were found to have had rheumatism without heart disease only 3—that is, 3.94 per cent.

Of organic heart disease without history of rheumatism, were found 11 (14.47 per cent.); of both heart disease and rheumatism, 10 (13.16 per cent.); of functional heart disorder, 11 (14.47 per cent.); of rheumatism with irregular heart, 5 (6.58 per cent.); of vague pains without rheumatism, 13 (17.10 per cent.) (Out of these 13 cases 3 had organic, 1 inorganic, 1 doubtful heart disease, and the remainder, no question of heart disease, being, therefore, also included under these headings.) The total percentage of rheumatism from these statistics is 23.68—closely coinciding with the results of Gowers, Ziemssen, and the committee of the British Medical Association. The total percentage of organic heart disease is 27.63.

The following conclusion are drawn:

1. Neither rheumatism nor heart disease is essential to chorea.

2. The preponderance of evidence points toward the conclusion not only that rheumatism and organic heart disease conjointly appear more frequently in the choreic subject than can be accounted for by coincidence, but that the same is true of each of these affections separately. It follows, therefore, that (a) rheumatism predisposes to chorea, and (b) organic heart disease has the same tendency.

3. (Drawn from the observation of

others.) Fatal cases are generally associated with organic heart disease, and probably with organic disease of the central nervous system (notably cerebral emboli).

4. There is a large class of functional cases—largely reflex, and fostered by circumstances tending to produce functional symptoms in general.

5. The pathological connection between

rheumatism and chorea, excepting in the cases where emboli are produced by accompanying endocarditis, is still obscure; probably no one theory is applicable to all cases.

6. The mechanism by which the peculiar phenomena of chorea are produced is unknown.—*Am. J. Med. Sciences*, May, 1892.

## REPORT ON NOSE AND THROAT DISEASES.

BY CHAS. H. KNIGHT, M.D.

### Woakes (E.) on the Pathology and Diagnosis of Necrosing Ethmoiditis.

—Seven years ago the author first published his views on this subject, which may be summarized as follows: Increase of fibrous tissue follows inflammation of the middle turbinated. This fibrosis extends along the vessels into the spongy bone and impairs nutrition by the pressure it exerts. Coincidentally myxomatous degeneration begins and atrophy of the bone takes place, as indicated by the presence of Howship's lacunæ and osteoclasts. Cavities form in the bone which tend to coalesce, and their contents, consisting of granulation or myxomatous tissue, press upon the atrophying bone and lead to "cleavage of the mass." In certain cases necrosis of bone takes place, involving the nasal wall of the ethmoid cells as well as the cells themselves. This process may extend from the turbinated body or may originate in the ethmoid cells. This necrosis is looked upon as the cause of nasal polypi and of the persistent recurrence of these growths in many cases. The so-called "cleavage," upon which the author lays great stress, results from extreme thinning and final giving way of the bony wall, the intermediate tissues retracting into the fissure thus formed. The series of morbid changes consists therefore of fibrosis, obliteration of arteries, absorption of bone, development of cysts and of polypous and granulation tissue, and finally interstitial death of bone. The last constitutes a source of irritation demanding the art of the surgeon for its removal, precisely as in the case of a decayed tooth or a carious astragalus. The adoption of the term "necrosing ethmoiditis" in designating this condition is believed to be amply justified.—*Brit. Med. Jour.*, March 12, 1892.

### McBride (P.) on Cysts of the Tonsils, Nose, Larynx, and Ear.

—Cysts of the tonsil are rare. Two cases are referred to, in one of which the cyst-wall was partially excised and in the other the cavity was opened by incision, cure resulting in either case. The creamy fluid contents of the cysts were free from taste and odor, in this respect differing from those cheesy accumulations so frequently met with in the crypts. Etiologically they are doubtless retention cysts resembling the condition seen in the vault of the pharynx and described by Tornwaldt. Cysts of the nose are by no means common. Hydatid and dermoid cysts have been described, as well as cystic growths from the turbinated bodies, the last mentioned being either primary or more probably a result of degeneration of mucous polypi. The author describes a form of cyst, of which he has met two examples, occurring in the inferior meatus or the floor of the nose, probably a retention cyst connected with a labial or a nasal glandule. A third variety of cyst is of considerable interest and great rarity. It is characterized by the presence of an air-containing cavity in the middle turbinated bone, due to pathological expansion of the normal air-spaces of the turbinated body. In one case the author removed a portion of the cyst-wall, and in another he crushed the cyst into a shape approaching the normal. The latter procedure proved unavailing, the cyst resuming its original form. It is thought to be undetermined whether these growths are congenital or acquired, although Heymann has witnessed the gradual expansion of one of these air cavities. Cysts of the larynx are said to be more common than any of those already referred to, and have been seen arising from the epiglottis, from the ary-epiglottic

folds, from the posterior wall of the larynx, the ventricle, and from the vocal cords themselves. The notes of an interesting case are given, in which the tumor was attached to the anterior part of the right ventricle.—*Brit. Med. Four.*, May 14, 1892.

(In the foregoing paper the author refers to the experience of Voltolini as to the frequency of cystic degeneration of nasal myxomata as being unique. In the clinics of the reporter this phenomenon is so often observed that it has long since ceased to be a curiosity. A similar statement applies to cysts of the middle turbinated bone, which McBride considers of "great rarity." As to the etiology of the latter condition there seems to be but little doubt that several agencies are engaged, or rather that the modes of formation are various. Expansion of pre-existing cells in the bone, rarefying osteitis, and curvation and final adhesion of the free margin of an hypertrophied turbinated body, may possibly be more or less concerned in their production.)

**Chatellier (H.) on Glandular Retention Cysts of the Anterior Part of the Nasal Fossæ.**—Two cases are related. In the first evacuation of the tumor by means of a Pravaz syringe was followed by an attack of erysipelas and subsequent recurrence of the swelling, which was finally cured by puncture and cauterization with the galvano-cautery at a low heat. The second case was cured by aspiration and injection with Van Swieten's liquor. In the discussion on this communication the etiology of nasal cysts was referred to as being often in doubt, and Potiquet remarked that ampullary dilatation of the osseous middle turbinated never results from a pathological process, but is rather an anomaly of development, a reversion explained by pathological anatomy. (In the preceding abstracts it is quite evident that reference has been made to at least three distinct and independent pathological processes which have not the slightest relationship, namely, glandular retention cysts, cystic degeneration of nasal myxomata, and cyst of the turbinated bone. The first may be found in any region supplied with glandular elements, the second is not peculiar to myxomata but is met with in various neoplasms especially at a late period of their existence, while the third has been observed, with perhaps two exceptions, only in the middle turbinated bone. Although the etiology of the last-

mentioned has been by no means clearly established, it is difficult to see how one can maintain that it is merely an "anomaly of development!")—*Arch. Internat. de Laryngologie*, etc., t. v., No. 2, p. 88. *The Four. of Laryngol.*, etc., April, 1892.

**Knight (C. H.) on Cyst of the Middle Turbinated Bone.**—The indications for treatment are thus enumerated;

1. Interference with nasal respiration.
2. Prevention of nasal drainage.
3. Reflex neuroses.
4. Anosmia.
5. Impaired quality of voice.

Unless the cyst is so large as to cause pressure or impede nasal breathing, it is seldom necessary to interfere. The bone is usually so thin that it may easily be crushed with forceps if desirable, and redundant tissue may be removed with cutting forceps. In large cysts, especially if associated with polypoid growths, the cold-wire snare will be found to be most serviceable. The pain of the operation, in spite of the free use of cocaine, is sometimes considerable, and subsequent reflex neuralgias are not infrequent. Hemorrhage is seldom excessive, and in several cases it was surprisingly scanty.—*N. Y. Med. Four.*, March 14, 1892.

**Mounier on a Rare Cause of Epistaxis.**—A case of hemorrhage from the vault of the pharynx leads to the following conclusions:

1. Epistaxis, generally from the anterior part of the septum, may be derived from the pharynx, even although the latter region may be in a healthy condition.
2. The fact that the blood flows from both nostrils or only from one is no evidence that its source is in the nasal fossæ.
3. Although anterior plugging will often arrest epistaxis, it should not be forgotten that in certain cases combined anterior and posterior plugging will fail, and recourse must be had to applications of hæmostatics to the retro-pharynx.
4. One of the best hæmostatics is antipyrin in watery solution, 1 to 10 or 1 to 5. It is better tolerated than the perchloride of iron even dilute, and is free from risk of any sort.—*La France Médicale*, May 6, 1892.

**Spicer (Scanes) on Hemorrhage from the Nose and Naso-Pharynx.**—He urged the determination of the cause of the hemorrhage in every case, and that care be taken not to overlook any

grave constitutional condition or to fail to treat it. He pointed out the necessity of a thorough examination of the nose and naso-pharynx to determine the exact source of the hemorrhage. He advised, in the first instance, such simple measures as pressure, raising the arms above the head, head thrown back, local application of ice, cold sponging, syringing the nose with hot water, etc.; in case these failed, plugging with creolin or other gauze, anteriorly first, and, as a last resort only, posteriorly. He deprecated the use of irritating hæmostatics, such as iron perchloride, and turpentine, on account of the serious discomfort they caused. Dealing with recurrent and habitual epistaxis, he thought it to depend very often on septal erosion in which an artery was periodically opened by accidental detachment of a crust; for this condition he advocated the application of a flat galvano-cautery point, followed by free use of some ointment to prevent hard scabs forming.

Dr. W. B. Cheadle regretted that Dr. Spicer had not been able to discuss those cases of slight hæmoptysis in which there was grave doubt as to whether the blood came from the throat or from the lungs. His impression of such cases was that a large number of them died of phthisis. He had seen three fatal cases of epistaxis in old people, the result of chronic alcoholism; in one of them hemorrhage took place from nearly all the mucous surfaces.

Mr. Rayner Batten spoke of myopia associated with habitual nose bleeding; he believed that the two conditions were dependent on a common cause, viz., high pulse tension.

Dr. Wm. Hill had seen two cases like those described by Mr. Batten. He had found hamamelis very valuable in epistaxis. His treatment for hemorrhage after nasal operation was syringing with hot water.

Dr. Boxall said that it was important not to use the water too hot, as at a temperature of 120° F. or more it was no longer a hæmostatic.

Dr. Caley described a case of fatal epistaxis from aneurism of the internal carotid artery.

Dr. Salisbury Sharp was in favor of perchloride of iron for epistaxis.

Mr. Drew spoke of common salt as a hæmostatic. He had not found perchloride of iron so very irritating as Dr. Spicer had described.

Dr. Hazel preferred perchloride of iron dissolved in glycerine, or glycerine of tannin.

Dr. Spicer, in reply, stated that he very commonly saw in the pharynx minute ruptured vessels and varicose spots, which led to slight streaks of blood in expectoration. He believed these were often erroneously supposed to be of pulmonary origin. He thought epistaxis in children often a sign calling attention to some grave systemic disease.—*The Med. Press*, May 4, 1892.

**Pollard (B.) on the Enucleation of Enlarged Tonsils, and on Hemorrhage Following Tonsillotomy.**—The author prefers ligature of the bleeding vessels in the throat to that of the common or the external carotid artery, which is a severe method and to be resorted to only when the condition of the patient has become critical. Local pressure and styptics are less sure and safe. Two cases are narrated in which the bleeding points were picked up and tied. Enucleation of the tonsil by means of the finger is advocated, and the following description of the method of operating is given: The surgeon places the tip of his forefinger between the upper and back part of the tonsil and the posterior pillar of the fauces, tears through the mucous membrane at that spot, and then peels off the tonsil from the wall of the pharynx until it hangs loose in the throat by a short pedicle attached to its lower and anterior part. The pedicle may be either torn through by twisting it or snipped across with a pair of scissors. The operation is often an almost bloodless one. While admitting the superiority of the Mackenzie guillotine and a pair of vulsellum forceps for operating in the majority of cases, he recommends enucleation in "buried" tonsils which cannot be engaged in the ring of the guillotine. The galvano-cautery method is thought to be tedious and incomplete, whereas enucleation may be done at one sitting under chloroform.—*Brit. Med. Jour.*, June 4, 1892.

**Newman (David) on Malignant Disease of the Tonsils, with Ten Illustrative Cases; the Statistics and the Bibliography of the Subject.**—Malignant disease in this situation is more common than the records appear to indicate. In carcinoma the lymphatics become involved early, whereas in sarcoma, especially the spindle-celled variety, the tumor may remain encapsuled and the



glands continue unaffected. The most common form of sarcoma is the round-celled, or lympho-sarcoma. Of 52 cases collected by the author nine were called round-celled, and eighteen lympho-sarcoma; in twenty-three the precise variety was not mentioned, one was described as a fibro-sarcoma and another as an adeno-sarcoma. The cases related contain many points of unusual interest. In one of sarcoma the tumor was removed and did not recur, but in the meantime the opposite tonsil became involved, and the patient died, after about five years, from exhaustion following hemorrhage. In another case, one of carcinoma, the disease began as a syphilitic gumma, and in still another of epithelioma the patient gave a history of having had syphilis, and the pharynx contained numerous characteristic cicatrices. A good deal of difficulty in determining the relative frequency of the various forms of carcinoma arises from the failure of observers to note the special variety of lesion, and encephaloid cancer has generally been regarded as the most common. Epithelioma is not very rare, the author having found twenty-four examples in ninety-two recorded cases. Only seven cases of scirrhus have been recorded.

This paper concludes with a consideration of the methods of treatment, which may be radical or palliative. The former includes removal of the tumor through the mouth and by external incision, either with or without preliminary tracheotomy. The risks of opening the trachea are slight and its advantages are considerable. The oral methods of operating are (1) by chemical caustics and escharotics; (2) by

the tosillotome or curette; (3) by ligation; (4) by *écraseur*; (5) by electric cautery and *écraseur*, and thermo-cautery; (6) by electrolysis; (7) by incision. The first is only to be condemned. The second appears to have been used in cases in which the nature of the tumor was not appreciated, or for diagnostic purposes. The third and fourth methods are available only when the tumor is of moderate size and can readily be embraced in its entirety, but there is danger of including some vital structure, as the internal carotid, the jugular vein, and pneumogastric nerve. This danger may be obviated by exposing these structures and retracting them through an external incision. The cautery has been used with satisfaction in appropriate cases, notably in one detailed by the author. Electrolysis seems to have been a failure so far as extirpation and arrest of the growth are concerned, although it has succeeded in relieving certain symptoms. The methods of operating by internal and by external incision are minutely described. Before resorting to the more formidable procedures, one should be assured of the probability of being able to remove the diseased tissue completely, or at least of the certainty of prolonging life and alleviating suffering. The palliative treatment in inoperable cases consists of the use of detergent antiseptic washes, anodynes, and hypnotics, removal of a portion of the growth or tracheotomy when there is difficulty in breathing or swallowing, and finally astringent applications, cauterization, or ligation of a vessel in case of severe hemorrhage. —*Am. Jour. Med. Sci.*, May, 1892.

## REPORT ON THERAPEUTICS AND TOXICOLOGY.

### Freeman (R. G.) on the Sterilization of Milk at Low Temperatures.—

It is well known that the boiling temperature to which milk has been subjected in all apparatus hitherto constructed alters its chemistry. According to Leeds, sterilization at the boiling-point of water causes the following modifications in the milk: The starch liquefying ferment is destroyed and coagulated. A portion of the lactalbumen is coagulated. Caseine is rendered less coagulable by rennet, and is acted on slowly and imperfectly by pepsin and pancreatin. Proteid matters attach them-

selves to fat-globules and probably bring about a less perfect assimilation of fat. Milk-sugar, by prolonged heating, is completely destroyed. According to Koplik, "from the temperature of 75° Celsius upward there is a separation of the serum albumen of the milk; the caseine loses its coagulability to rennet and at 85° C. amounts of rennet which for the raw condition of milk are found sufficient to act cease to be effective." All these changes affect its digestibility and to some extent its nutritive value, especially for young children. Freeman has devised an appa-

tus consisting essentially of a partitioned chamber holding bottles of milk of measured bulk, which is set in a larger vessel of a measured amount of boiling water. An equalization of temperature takes place in about half an hour whereby the above changes are prevented. The milk while not actually sterilized in a bacteriological sense is yet sufficiently so for all practical purposes of infant feeding. A full description of the process is given in the original article.—*N. Y. Med. Record*, July 2, 1892.

**Hare (H. A.) on the Strontium Salts.**—There are now on the American market an iodide, a bromide, a phosphate, and a lactate of strontium. Of these the only two I have tried sufficiently to speak of them are the bromide and lactate.

The bromide seems to be possessed of less power as a bromide than the corresponding salts of potassium and sodium, but it does not cause in my experience the eruptions of the skin which the latter produce. The taste is not so disagreeable when it is given in solution, and it is less apt to disorder the stomach. Indeed, as is well known, it seems to be very useful in painful dyspepsias and in gastralgia, allaying soreness and tenderness. The dose I have given has been 10 to 30 grains three times a day. The lactate of strontium, recommended originally by several French clinicians as a remedy for the albuminuria of Bright's disease, has seemed to be of very considerable value, and Dr. J. C. Da Costa, of Philadelphia, has informed me that in his hands the drug has proved peculiarly efficacious. Unfortunately, the albuminuria is apt to return if the drug is withdrawn. The dose of this salt is 30 grains three times a day.—*Therap. Gas.*, June 15, 1892.

**Clayton (H. L.) on the Salts of Strontium.**—From a series of experiments on animals, C. draws the following conclusions with reference to the bromine salt.

1. The purity of the medicament may be considered to be an absolute *sine qua non* for therapeutic efficiency.

2. It is perfectly innocuous.

3. It possesses no irritative action on the stomach; aiding digestion and stimulating the appetite.

4. It has a beneficial action in cases of dyspepsia, especially in those associated with hyperacidity or flatulence.

5. It is a perfect substitute for the bro-

midé of potassium, and therefore should supplant it in the treatment of epilepsy.

6. It is advantageous in the treatment of albuminuria, diabetes of hepatic origin, and the various forms of nephritis.

7. It may be employed as a succedaneum for all the alkaline bromides; having an elective action as an antiseptic, antifermentive, and antiparasiticide agent on the entire gastro-intestinal tract, properties which have been improperly claimed for several drugs. Naphthol, the salicylates, sulphite of soda, etc., etc., will sometimes act in certain cases, if given in elevated doses. But they are unreliable, often toxic and always irritating in the end, and their continued use is impossible, while the strontium preparations never irritate, even in large doses.

Finally, its anthelmintic action claims our attention. That it possesses this property to a remarkable degree cannot be questioned; the results of our experiments have shown it. Undoubtedly the salts of strontium will have other uses on lines of treatment to which we have not here referred, for it affords a broad field for investigation and research.—*Times and Register*, June 4, 1892.

**Becker (P. G.) on Euophen in Minor Surgery.**—In the case of a driver of a beer-wagon, the index and middle fingers of the right hand had been severely crushed by being caught between two barrels. There was a fracture of the middle phalanx of the index finger, with several deep lacerated wounds of both fingers.

Several days before coming to me the patient had applied a carbolic-acid solution to the fingers, which had become of a greenish-black color. The fingers and hand were intensely swollen; there was pain in the elbow, and a dark, foul smelling pus exuded from the wounds. The treatment was by thorough washing of the injured parts in bichloride solution, insufflation of euophen into the wounds, and envelopment of the fingers in a one-to-eight ointment of euophen and lanolin. Five days therefrom the swelling of the fingers had become reduced and there was less pus secretion from the wounds. The skin was still black and easily detached from the fingers in several places. A dark pus covered the denuded surfaces. As much of the cuticle as could be separated was removed, and euophen was dusted upon the denuded surfaces, as also into the

wounds. This treatment was continued, and in about eighteen days the wounds were entirely closed, the cuticle having been freely and completely separated two days previously.

A child, four years old, was suffering from a large cervical abscess. It was opened and a large quantity of pus evacuated. The abscess cavity was curetted and euophen insufflated. The child was seen several days thereafter. Recovery was uninterrupted.

A child, aged three years, had had its buttocks and left lower extremity severely scalded by falling into a pot of boiling water. Carron oil was applied for forty-eight hours, followed by the dusting of euophen over the buttocks and half of the thigh. Boric acid and bismuth were used on the rest of the thigh and on the leg. As no deleterious results followed the application of euophen, its use was adopted upon the whole of the scalded surface. Recovery was complete with no untoward symptoms.—*New York Medical Journal*, June 4, 1892.

**Potts (C. S.) on Sparteine Sulphate as a Remedy for Tremors.**—Three cases are reported in which great benefit was derived from the use of this remedy.

Case 1.—Male 173, weaver. Tremors for several years in both hands. Not increased by muscular exertion, but worse since a "stroke of paralysis" two years ago: feet swollen at times, anorexia and nausea, orthopnoea, aortic diastolic murmur. Spart. sulph. gr  $\frac{1}{4}$  t. i. d.; in five days improved heart and lessened tremors. In addition a tonic of arsenic, strychnine, and dilute muriatic acid was given. Tremor disappeared completely.

Case 2.—Male, carpenter, aged 32, with violent tremors of both hands, which he says have persisted since he was eight years of age. The tremors become worse after working hard, or whenever he has headache, from which he suffers a great deal, the pain involving the entire head. He is very easily excited or worried; tongue tremulous; no heart lesion. Sulphate of sparteine, gr.  $\frac{1}{4}$  t. i. d., was prescribed, with the result that three days later he reported that both the headache and tremor were much improved. The sparteine was increased to gr.  $\frac{1}{4}$  t. i. d., and in ten days he returned with a history of continued improvement. The sparteine was then stopped, and a tonic of arsenic

and strychnine substituted. At his next visit, five days later, he reported himself much worse, the headache having returned, and the tremor being aggravated. The original treatment was then returned to, but, as he discontinued his visits, with what result is not known.

Case 3.—Male, 53, stone mason. In addition to ptosis of the left eye and other symptoms of cerebral syphilis, from which he was suffering, had a severe tremor of both hands; increased after muscular exertion. Under specific treatment, of two months' duration, all of his symptoms improved, except the tremor. Sparteine was then added to the treatment, and immediate improvement followed. This has continued for one month, and he is at present taking gr  $\frac{1}{4}$  t. i. d., with the result that "his hands are better than they have ever been."

**Reichert (E. T.) on an Experimental Study of Certain Actions of Strychnine in Excitant and Paralytic Doses.**—From the results of this research the following conclusions are deduced:

1. The minimum lethal dose for dogs when intravenously injected is about .0002 gramme to the kilogramme of body-weight.

Doses of from .05 to .02 gramme to the kilo intravenously cause a condition of absolute muscular quiet, and by means of artificial respiration the animal may be kept alive in excellent general condition.

Quantities in excess of .094 gramme to the kilo may be injected intravenously in divided doses without causing death, provided artificial respiration is practised.

2. The toxic action of this remarkable substance is so directed to the motor cells in the spinal cord that the minimum poisonous dose is exceedingly small, owing to the production of asphyxia or exhaustion by the violence and persistence of the tetanic seizures. Should artificial respiration be maintained, nearly five hundred times the minimum fatal dose may be injected without causing death.

By a proper regulation of the size of the dose and the method of administration, the stage of excitement may be prolonged over an almost indefinite period, or may be so brief as to last for but a few seconds.

3. During the stage of excitement the following effects and actions are observed:

a. The motor disturbances and convulsions are of spinal origin.

b. The sensory nerves and muscles are unaffected.

c. The motor nerves, after the onset and continuance of convulsions, become depressed from overwork.

d. The pulse-rate is first lessened in frequency, then increased, and finally diminished, the first effect being due to a stimulation of the cardio-inhibitory apparatus, the second to its depression, and the last to a depression of the excito-motor or automatic-motor ganglion in the heart.

e. The arterial pressure is primarily diminished, then greatly increased, and at last diminished, the first effect being due to some obscure action on the vaso-motor centres in the medulla oblongata, the rise to a stimulation of the vaso-constrictor centres in the same part, and the final fall to a depression of the heart and vaso-motor centres.

f. The respiration-rate is not specifically affected unless it be decreased, or during the period of convulsions, when it may be decidedly increased.

g. The bodily temperature is increased, this being due to an increase of heat production, which is to some extent independent of the motor excitement.

During the stage of paralysis the following points are noted :

a. The muscles do not seem in the least affected.

b. The sensory nerve-fibres are inexcitable to strong electrical currents.

c. The motor nerves do not respond to strong electrical stimulus, although they may transmit impulses from the nerve-centres.

d. The pulse-rate is reduced, but the height of the curves increased, the first effect being due to a depression of the motor ganglion in the heart, and the second to the greater filling of the viscus with blood, and perhaps to a direct stimulation of the muscular substance.

The cardio-inhibitory fibres are paralyzed, but no increase in the frequency of the pulse-rate is observed, owing to the predominance of the depressant action on the heart ganglia. Stimulation of the vagi causes smaller pulse-curves and a slight increase in the frequency of the beats.

e. The blood-pressure is increased, unless the dose has been greatly in excess, when it is diminished. The increase is due to a stimulation of the vaso-motor centres in the medulla oblongata, and the decrease to a depression of the heart and vaso-motor palsy.

In non-curarized animals the pressure sinks below the normal within a few minutes after the tetanic paroxysm, but in those curarized this depression is less marked, and the stimulant action on the vaso-motor centres is stronger.

Asphyxia, or electrical stimulation of sensory nerve, is unable to cause a rise of pressure as in the normal animal, the former always inducing a fall.

f. The hæmoglobin is in some way affected, so that it cannot be oxygenated to the normal degree. The spectroscopist reveals nothing but oxyhæmoglobin.

g. The sensory and motor nerves seem absolutely inexcitable to strong electrical stimulus, although the latter may be capable of conveying impulses from the nerve-centres to the muscles.

h. The temperature is increased, owing chiefly to a decrease of heat dissipation. Heat production may be slightly increased or decreased.

Cocaine is unable to cause a marked increase of heat production and temperature, as in the normal animal.

Apparently strychnine in paralytic doses paralyzes the hypothetical accelerator heat-centres, and leaves intact the automatic heat-centres.

i. The paralytic condition caused by large doses of strychnine resembles that produced by curare, but is in many important ways entirely distinct.—*Therap. Gazette*, June 15, 1892.

**Montgomery (E. E.) on Bromide of Ethyl.**—In the bromide of ethyl we have an agent which seems, in the experience of the writer, to meet all requirements in this special field. It has an exceedingly pleasant odor, in comparison with that of the other anæsthetics; the patients rapidly succumb to its influence; but small doses are required; it produces none of the unpleasant sensations of difficulty of breathing and feeling of suffocation. There is an absence of the stage of excitement or struggling, and anæsthesia is produced sufficient for ordinary slight operations and for many examinations before the patient is rendered unconscious. Thus the patient can obey the directions of the physician, change the position of the limbs or parts of the body, and yet not experience any pain, even when an abscess is incised or a wound probed.

The effects of the drug are exceedingly evanescent, the patient recovering con-

sciousness even when thoroughly under its influence in less than a minute, and awakes from it as from a sleep, usually without any unpleasant effect. It is exceedingly rare for a patient to suffer from vomiting, which is a frequent sequel from the administration of ether. Its value in cases of labor is in that it can be administered with the onset of the pain; the patient, taking two or three deep inspirations, loses the sensation of pain, and yet is able to co-operate with the attendant in whatever may be desired.

In cases of confinement, the method of administration is to begin with the second stage of labor, using a Hawley inhaler, in the barrel of which the drug is placed. The patient holds it herself, and as soon as she has received a sufficient amount to render her unconscious, the inhaler drops from her hand. In this way the necessity of an assistant is dispensed with, and the patient is enabled to use the anæsthetic with the event of each pain.

In nearly five hundred cases M. has seen no ill effects from its use. Occasionally it upsets the stomach and always leaves a garlic-like odor on the breath. The few cases in which untoward results have been observed do not warrant the rejection of the remedy at the hands of the profession. —*Therap. Gazette*, June 15, 1892.

**Gordon (J.) on Exalgine.**—The author's experience with the remedy is as follows :

Disease.	No. of observations.	Successful cases.	Unsuccessful or doubtful cases.
Toothache.....	7	3	—
Headaches.....	35	28	—
Neuralgia (facial).....	20	12	3
Sciatica.....	3	1	2
Lumbago.....	7	5	2
Intercostal neuralgia.....	3	3	—
Locomotor ataxy.....	8	1	—
Biliary calculi.....	2	—	2
Rheumatoid arthritis.....	2	1	1
Otitis media.....	1	1	—
Tubercular disease of prostate.....	4	—	1
Total.....	92	55	11

In all, records of ninety-two observations were kept, and sixty-six patients were treated with the drug. In fifty-five cases the action of exalgine was successful in relieving the pain, while eleven cases yielded results that were unsuccessful or doubtful. The benefit of exalgine was most marked in cases of nervous headache, facial neuralgia, intercostal neuralgia, and lumbago. Although the pain-subduing action of the drug may be feeble, it has given in certain

cases excellent results. Further observations will at last fix its full value as an analgesic, and possibly justify the hope that it may take a valuable, if restricted, place in the group of those bodies which relieve suffering.—*London Lancet*, May 28, 1891.

**Stockman (R.) on the Physiological Action of the Active Principles of Urechites Suberecta.**—The urechites suberecta belongs to the natural order *Apocynaceæ*, and grows abundantly in Jamaica and other West Indian islands, where it is known as the "savannah flower" or "yellow flowered nightshade." Regarding its medicinal properties, Descourtiz gives an account of its being used in venereal diseases, in dropsy, leucorrhœa, chlorosis, blennorrhagia, and other affections. The milky juice is also reputed to "take away and cure ringworms and freckles." For most of these uses there is no rational foundation, but Descourtiz notes that "it provokes an abundant secretion of sweat and urine," and, as this is borne out by the results of pharmacological investigation, it doubtless would prove efficacious in certain cases of dropsy.

In cases of poisoning in man, violent vomiting, purging and griping, and slight convulsions in various parts of the body have been noted.

Of urechitin the fresh leaves contain at least one half per cent. When isolated it is in small perfectly white crystals, insoluble in cold water and in cold spirit of less than 40 per cent. alcoholic strength, very slightly soluble in boiling water, quite soluble in strong alcohol. It is a glucoside, and has the formula  $C_{28}H_{48}O_8$ .

Urechitoxin also occurs in small colorless crystals, soluble in 1,500 parts cold water, much more soluble in alcohol. It is a glucoside, having the formula  $C_{13}H_{20}O_5$ ; about 3 per cent. is obtainable from the dried leaves, and about one half per cent. from the fresh. Both substances are intensely bitter when in solution; urechitin being insoluble in water is tasteless in the solid form. A solution of urechitoxin, 1 in 40,000 water, tastes excessively bitter, and if left in contact with the mucous membrane of the mouth it causes tingling and a feeling as if the parts were swollen.

Both substances give characteristic chemical reactions, and, on decomposition, yield a white crystalline body, which Bowrey has named "urechitoxetin." He states

that it is physiologically inactive, and this S. can confirm from his experiments.

The latter go to prove that urechitin is a poison of a very active kind, which may be included in the digitalis group. Its action on the frog and frog's heart, the effect on dogs, the comparatively large doses necessary to affect rabbits, and its action on the circulation, point to a similarity between it and other substances which have now been recognized as essentially resembling digitalis in their physiological actions.

It is improbable that the urechites sub-recta will ever prove to be of value as a cardiac tonic. S. has made no observations in this direction, as it seems to possess in a high degree the objectionable cumulative properties which have been so often remarked in the case of digitalis.—*Brit. Med. Jour.*, June 18, 1892.

**Belt (A. M.) on Hiccoughs Cured by Pressure upon the Supra-Orbital Nerves.**—W. L.—, when wrestling on March 24th, was thrown, striking his head against a wall. The following morning he consulted a doctor with regard to his fallen palate. In the afternoon hiccoughs commenced and continued six days, when I was sent for. I found the man hiccoughing twelve to fifteen times per minute, with a forlorn and worn-out expression of countenance. As there was quite an array of medicine near by, instead of giving a prescription I applied my thumbs to the supra-orbital nerves, and within three minutes the hiccoughs were completely checked. They returned fifteen hours afterward, when pressure was again applied and the hiccoughs were suppressed for nine hours. The third and last time pressure was applied the hiccoughs disappeared to return no more.—*N. Y. Med. Record*, May 14, 1892.

**Radcliffe (S. J.) on Ichthyol as a Remedy for Facial Erysipelas.**—In three days after the treatment was begun in my cases by washing off the applications, the improvement was manifest, and the fever never rose after the second day, but gradually declined. The ichthyol is not at all unpleasant, and was not objected to by patients. It makes the skin a dark-brown color, and, of course, looks unsightly while on, but it does not stain the skin, and is easily washed off. The bedclothing and pillows, as well as the garments of the patient, should be protected, as wherever it

touches it leaves a brown mark, which is easily removed by washing. The best plan of using it is to compound an ointment of equal parts of ichthyol and vaseline or lanolin, or, if a weaker or thinner one is desired, equal parts of ichthyol, lanolin, and water will be better where a large cutaneous surface is under treatment. My plan is to order two drachms each of ichthyol, lanolin, and water, and have this applied uniformly over every part of the erysipelatous inflammation, ears, eyelids, and all, and repeat this at least twice daily. In three days, on washing it off with a little tepid water, and with or without a little lather of fine quality of soap, it will be found that the swelling has subsided, and the erysipelatous process has been arrested, except perhaps on the extreme borders. I have discontinued it after three days, and dusted the paler parts with flour, applying the ichthyol only to the outskirts, the irregular parts of the pinna of the ear, and back of the neck. But a better plan is to continue the application until the sixth day, or until all traces of the disease externally have disappeared. This will not be beyond the fifth or sixth day. In addition to this, I order 10 drops of a mixture of thirty grains of quinine in one ounce of muriated tincture of iron every three hours, and nourish the patient well. The remarkable part of the treatment is that the temperature is at once reduced, and is not elevated again, never going beyond 100° or 102°, and may be normal after the first day. No relapses have taken place in my cases, and convalescences were satisfactory and without sequelæ. I know of no more satisfactory remedy.—*Therap. Gazette*, March 16, 1892.

**Hale (G. V.) on Pilocarpine Nitrate in Facial Erysipelas.**—Two cases of facial erysipelas in infants—one male, one female—respectively seven and nine months old, with temperature (rectal), when first seen in consultation, of 104° and 105°, cerebro-spinal symptoms, after intelligent treatment by all the usual means, yielded to pilocarpine nitrate in slightly diaphoretic doses, being markedly improved in from twenty to thirty hours, and convalescent in a week. The only laxative used was castor oil. In these cases, contrary to my usual experience, we were unable to check the spread of the dermal inflammation. It gradually invaded every inch of skin, even to finger and toe

tip; but the advancing line was only of a pale reddish hue. The temperature declined to 100° after the third dose; the infants rested well and nursed again (the breast had been refused and breast milk was administered with a spoon for about thirty hours).

The results of these cases, so unpromising and malignant at first, are entirely consonant with my experience with the remedy in many other cases, and the course of the disease in these instances varies only in the failure to promptly arrest the advancing line of inflammation.—*Phil. Med. News*, May 14, 1892.

**Beatty (Wallace) on the Dietetic Treatment of Typhoid Fever.**—Concerning relapses in this disease, B. says: Whatever view may be held as to the genuineness of so-called relapses, and whatever theory may be held as to the cause of relapses, I think the necessity for care in diet, considering the position of the lesions, must be admitted. It is impossible not to believe that grave injury may be inflicted upon the inflamed and ulcerated bowel by want of care in both the nature and quantity of food. Still, I believe, sufficient care is not exercised in this matter. While most physicians are agreed upon the advisableness of liquid food, many show too little regard as to the quantity of this liquid food which they allow. Indeed, it seems to be the idea of many practitioners, to judge of them by their practice, that, provided they are careful as to the nature of the diet, the quantity is of no great importance.

Milk is unquestionably the best and safest diet. It may be diluted with soda water or lime water. If there is diarrhoea it is best to give it boiled. Sometimes it is best to peptonize it. If a patient can take milk, milk alone is the best food during the entire illness. If milk is vomited, or curds are passed by stool, whey may be advantageously given; if whey is given, beef-tea with the grounds, or beef-juice, should be given along with the whey to take the place of the albuminate casein. With regard to beef-tea, some object to its administration on the ground that it causes gaseous decomposition in the intestine, and so increases the tympanites. I have not found this to occur. I consider that beef-tea is a useful addition to milk diet when the patient is unable to take a sufficient quantity of milk. It seems also to act as a stimulant.

Farinaceous foods are often given. I am not in the habit of giving them to enteric patients. I object to them on two grounds—firstly, I think they may cause troublesome flatulence, and may increase the fever, and, if given early in convalescence, may cause a fresh outburst of fever; secondly, they are not needed when sufficient milk can be taken. If starchy food is given it ought to be in a thin semi-fluid form. Beaten up eggs should be avoided unless milk cannot be taken. In any case two to three pints of liquid food daily are sufficient for an adult, and children in proportion.—*Edinb. Med. Four.*, May, 1892.

**Wood (H. C.) on Turpentine in Typhoid Fever.**—Wood believes that turpentine is of great service in healing intestinal ulcers, which, after the fever, so often cause diarrhoea and intestinal indigestion. Again, the remedy is of great service when we have tympanites with dryness of the tongue, developing in the end of the second week of the disease. Wood, believing that turpentine acts locally, that in all cases of typhoid fever ulceration exists, that properly administered the drug is incapable of doing harm, is in the habit of giving towards the close of the second week of typhoid fever turpentine, without looking for special indications, and, as the result of an experience of considerably over a quarter of a century, he believes the practice to be a good one, and that the use of turpentine does distinctly tend to lessen the severity of the local lesions in enteric fever.

In closing this brief paper, attention is called to the powers of glycerin in disguising the taste of turpentine; the following formula is given:

℞ Ol. terebinthinæ, f 3 viii;

Glycerinæ, f 3 i;

Mucil. acaciæ, f 3 iss.;

Aquæ menthæ piperitæ, q.s. ad f 3 viii. M.

Sig.—Tablespoonful every four hours during the day. Shake well.

—*Therap. Gazette*, June 15, 1892.

**Nealy (E. T.) on Satisfactory Treatment of the Tympanites in Typhoid Fever.**—I saw a case in consultation last year, which was undoubtedly intelligently treated. The distension was in the extreme. So far as I was able to determine, the case was uncomplicated with perforation, and it seemed as though the man would live if relieved of the accumulation of gas. All of the usual

methods had been applied — injections, aspiration, and rectal intubation—but with negative results.

A similar case occurred in my own practice during the last year. A boy, nine years of age, during the third week of fever, *suddenly* developed an alarming tympanites. The abdomen was fearfully distended, lower part of chest wall was widely forced out, stomach collapsed and unable to retrain drugs, food, or stimulants. Respiration was labored and rapid. This was a case that I had been holding up under heroic doses of stimulants, and without them he began to sink rapidly. I considered the end certain and close unless relieved of this condition. I tried all of the usual methods without giving the needed relief. I then used the injection which I commonly use in abdominal section: one ounce of salts, two ounces of glycerin, three ounces of warm water, and thirty drops of turpentine. In thirty minutes the child began passing liquid stools, accompanied with an immense quantity of gas, with very decided relief of alarming symptoms. The injection was repeated in a few hours for another rapid accumulation of gas, and with same results. The child made a perfect recovery, although it was one of the worst cases I have ever seen.—*Univers. Med. Mag.*, July, 1892.

**Jones (T.) on Oxalic Acid and Acute Articular Rheumatism.**—In a large manufacturing establishment where blueing is made, a young Irishman, aged twenty-four years, was employed. The patient had always enjoyed excellent health until he entered this house, and was one of thirteen brothers and sisters, all of whom were healthy. His duty in this house was to make blueing. To one barrel of liquid twelve pounds of oxalic acid was added. He kept his hands and forearms up to his elbows immersed in this solution for ten hours each day, meanwhile stirring the solution with his hands. He soon developed a typical articular rheumatism involving several of the large joints, and had pyrexia, pain, acid perspiration, etc. He treated himself for a while with a proprietary preparation of sarsaparilla, and was in a wretched state of health when first seen by me. The disease, however, soon yielded to large doses of salicylate of sodium. One year subsequently he presented himself to me for examination for life insurance. I found some hypertrophy

of the left ventricle and a well-marked aortic systolic murmur. Being transferred to a different department in the house, he has had no recurrence of the rheumatism.

His successor, a boy eighteen years old, who had a good personal and family history made blueing in the same manner as his predecessor, and like him has his hands and forearms immersed in the mixture daily for ten hours. In one week he developed a moderately severe case of rheumatism which involved the knees and one elbow, but not the endocardium. The disease was obstinate, and the boy left the store disabled. He was succeeded by two other boys, younger, both of whom had good family health records, who had never had rheumatism, but they now both developed the disease, and became temporarily disabled. I did not examine the hearts of the last two patients, as they were not directly under my care, so I am ignorant as to whether or not the endocardium of either was involved.

In treating the first two cases it never occurred to me that a possible cause for the rheumatism was oxalic acid; but when four cases occurred in such quick succession my suspicions were aroused, which I communicated to the proprietor, suggesting that the blueing hereafter should be stirred with a ladle instead of the hands. The suggestion was adopted, since which time no other employees have had rheumatism. The blueing was manufactured in a basement which was somewhat damp, but I was informed that no other workman in the basement had ever contracted rheumatism, save those whose hands and arms had been immersed in the oxalic acid solution.

If we accept the causal relation between this acid and acute articular rheumatism, it involves the acceptance of two other propositions not ordinarily held by the medical profession: first, that other acids than lactic may cause articular rheumatism; second, that, contrary to the ordinary teaching, the human skin is capable of more or less absorption when long in contact with a liquid solution.—*No. West Lancet*, June 15, 1892.

**Thayer (W. S.) on the Value of Methylene-Blue in Malarial Fever.**—Further researches with this remedy lead the author to the following conclusions:

1. Methylene-blue has a definite action against malarial fever, accomplishing its



end by destroying the specific organism ; but it is materially less efficacious than quinine, failing to accomplish its purpose in many cases where quinine acts satisfactorily.

2. The action appears to be rapid, the chills disappearing or the temperature, in the remittent cases, falling to normal during the first four or five days ; but later, however, if a sufficient number of organisms have resisted the drug, they appear to develop again directly under its influence, causing a return of the symptoms.

3. Methylene-blue seems to have no advantages over quinine which would warrant its further use.—*Fohns Hopkins Hosp. Bull.*, May, 1892.

**Churton (T.) on the Use of Exalgine in Graves' Disease.**—The poisonous dose of exalgine seems to vary greatly for different persons. A woman aged twenty-eight, of fair complexion, having typical Graves' disease, had, after some months, extreme exophthalmos and congestion of both conjunctivæ, with ulceration of the left cornea. Leeches, lotions, etc., gave very little relief. At length the pain becoming severe, exalgine was tried, half a grain dissolved in five minims of spirit of wine and a tablespoonful of water, every half hour for three times when pain was present. Next day not only was the patient free from pain, but the congestion had entirely disappeared ; the eyes had changed from flaming red to perfectly white. During the next month, to satisfy myself and several critical observers as to the influence of exalgine, experiments were made ; all the other drugs and appliances were tested in turn. The result was always the same : when exalgine was given, the eyes were white ; when it was omitted, they became red and painful within a day, no matter what other drugs were given or lotions applied. Upon trial being made it seemed that the good effect was less marked when the whole dose of a grain and a half was given at one moment than when it was given in divided doses—half a grain every quarter of an hour for three times.—*London Lancet*, May 28, 1892.

**Denison (C.) on a Portable Lung Compressor or Emphysema Jacket.**—I wish to describe a device I have had constructed for the self-treatment of emphysema. We will call it the Portable Lung Compressor.

In Rossbach's apparatus, the chest was

compressed backward against the back of the chair, while in this there is a more even compression of the thorax in all its parts, and this jacket can be used, not only in the sitting posture, but either lying down, standing, or even during exercise by walking. Of course, the great aim is to aid expiration.

This lung compressor, or emphysema jacket, is supported and controlled by a simple nearly square frame, which can be hung against the wall, so that the patient can get into the jacket alone. This frame has for its sides pivoted, half round, elliptical beams, arranged so they can be pivoted at from one to three inches from their centres, thus giving greater compression as desired. To these, bands are fastened by buckles, which bands are sewed to the opposite sides of the jacket, and therefore cross each other at the patient's back. By their traction they squeeze the chest when the jacket is used. The compression can be made to suit any shaped chest, or any particular part of a given chest, by dividing the front lacing of the corset in three different fastenings, and by the adjustment which the posterior straps and buckles and the retaining shoulder straps permit. The power is ample, which is given by the side levers (attached to the middle of the side rollers), as they are moved forward by the patient's hands during expiration, and backward during inspiration.—*Four. Am. Med. Asso.*, May 28, 1892.

**Turner (J. E.) on Treatment of Membranous Croup.**—The treatment I have used since February, 1891, is based upon the allaying of inflammation about the site of the membrane, effecting the separation of the membrane, lessening the formation of new membrane, effectually controlling laryngeal spasm, and sustaining the strength. I use asafetida by suppositories to ally spasm and to give needed intervals of quiet, restful sleep, and consider it a valuable and much overlooked remedy in membranous croup.

For the other conditions or symptoms I used ammonium chloride given in syrupy mixture without water, as the addition of water makes it unpalatable to children.

In Wood's *Reference Handbook*, in an article written by Dr. Nickles, of Cincinnati, "Wibmer found a very decided increase of the bronchial mucus after hourly doses of eight to fifteen grains of ammonium chloride, and other careful ob-

servers noticed the same effect. Experiments of Rossbach seem to show a different mode of action. Under the influence of the salt, the tracheal mucous membrane became anæmic and the secretion of mucus gradually ceased. The utility of ammonium chloride in catarrh of the air-passages may therefore depend upon a favorable modification of the vascularity of the mucous membrane, not merely upon a change of the quantity of the secretion." I am of the opinion that Rossbach's view is the more probable one regarding the action of ammonium chloride, and will better explain its beneficial action upon the catarrh accompanying croup—*Times and Register*, May 19, 1892.

**Fenn (C. M.). An Incarcerated Hernia Relieved on the Fifth Day by Local Applications of Ether, Position, and Manipulation.**—Some time ago a middle-aged sporting man, with the following history, came to the County Hospital, three miles from the city, and then under my service.

Five days previously he clandestinely occupied a bed in one of our hotels, hoping to speedily reduce a chronic inguinal hernia. Failing in this a physician was summoned who, meeting with no better success, gave him an anodyne and left him for the night. On the following day a consultation was held which was interrupted by the landlady ordering the trio out of the house! During the next forty-eight hours, at his new quarters, four doctors were in frequent attendance, and finally decided that operative interference was imperative.

At our interview, on the fifth morning, I learned that stercoraceous vomiting and anorexia had been present, with other symptoms, yet he had survived the jaunt of three miles, and after a good night's rest was in a fine condition.

As I was *en route* to visit a pressing case, frequent applications of ether were ordered, meanwhile, as at least a good preparatory treatment. He was also placed in a position for taxis which I believe to be in a measure my own, as well as a most helpful one in such cases. The hips were elevated upon the back of an inverted chair, to an angle of about forty-five degrees with the abdomen. Feet with toes turned in hung over the highest or last round of the chair. In this position, differing somewhat from the descriptions of authors, gravity be-

comes a *vis à fronte* which efficiently supplements the *vis à tergo*, or manipulation of the surgeon, and is a ready method for relaxing the muscles and fasciæ involved.

Upon my return, a stimulating enema was ordered which dispersed the intestinal flatus. After this and a brief attempt at taxis, I was pleased to see the intestine return to its proper receptacle. Convalescence was rapid and complete.—*Four. Am. Med. Assoc.*, April 16, 1892.

**Bradbury (S.) on the Power of Sulphate of Magnesium in Curing Catarrhal Inflammation of the Digestive Track.**—From an experience with the remedy in several cases of inflammation of the three inner coats of the bowel, mucous, areolar, and muscular (as evidenced by violent griping pains with bloody and slimy discharge), B. has formed a high opinion of the value of this salt in curing such conditions. He lays special stress on the dose, and says:

"I have found, in a large experience in using this salt, that small doses do more harm than good. The smallest dose for an infant should not be less than a heaping teaspoonful, and a great spoonful may be given without harm. The truth is, the greater the dose the less it gripes. In my case above, I took half a pint of clear salt dissolved in water without the slightest griping when operating. This medicine does good in the case mentioned, evidently by producing a copious discharge from the lining of the digestive track, without having any but the slightest effect upon the muscular coat. It is totally unlike ordinary cathartics, it simply causes the excretion of fluids from the digestive mucous membranes, hence the safety in giving large doses, as the intestinal muscles are not acted upon by them."—*New York Medical Record*, July 9, 1892.

**Rosenau (M. T.) on the Value of Rectal Injections in the Treatment of Dysentery.**—Enemata can even be caused to pass the ilio-cæcal valve.

It is, in fact, such an easy matter to cleanse out the lower bowel and apply directly our antiseptic, or astringent, or sedative, or stimulant, or whatever is desired, that the rationale of the treatment must appeal to all.

The patient lies on his left side, thighs flexed, hips elevated. An ordinary soft-rubber catheter is passed its full length into the rectum. The fluid is delivered from a

fountain syringe, held from two to four feet above the body of the patient. The finger on the delivering tube acts as a governor to the amount of fluid which is allowed to flow. The lowering or raising of the reservoir determines the amount of pressure.

If the fluid is injected slowly, no pain is caused—except the feeling of weight and tension in the abdomen. Sometimes patients complain of colicky pains about the umbilicus, which pass away after a few moments' interruption in the flow.

If there is much tenderness about the anus and rectum a cocaine suppository may be given ten minutes before introducing the rectal tube.

The amount which different patients are able to retain varies considerably. Adults usually hold four or five pints without difficulty.

In some severe cases, where the patient's strength is exhausted and the parts are relaxed, the injection will run out alongside of the rectal tube at the same time that it is being forced in. In such cases I have used the longest rectal tube and continued the injection until the return flow is as clear as the fluid injected.

The relief afforded is prompt and decided, lasting from two to fourteen hours after the enema, the time lengthening as the case progresses favorably.

Preferable solutions are blood-warm sterilized water, which answers in mild cases; sodium salicylate 2-4 per cent. solution; and peroxide of hydrogen, 10-25 per cent. solution. When a distinct astringent is wanted, alum in from 2 to 4 per cent. solution has been found to act promptly.—*New Orleans M. & S. Jour.*, July, 1892.

**Demarest (F. F.) on Antipyrin in Diabetes.**—Some time since I was called upon to treat a lady who had been suffering from this trouble for five previous years.

When I took charge of her case she was passing a large amount of urine containing 20 per cent. of sugar.

In treating the case I used all the regulation drugs, but was unable to make any definite impression in her case.

In despair, partly, and on theoretical grounds, I put the patient on antipyrin for one week, and was much delighted to find at the end of this period that the sugar was reduced to one half per cent.

I was compelled to stop the antipyrin on account of its usual unfortunate effect

on the heart-action, and returned to my previous treatment with bromide of arsenic. In about a month the urine showed an increase of sugar to 10 per cent. I then made another trial with the antipyrin for a week and succeeded in reducing the sugar to one quarter per cent., in spite of the fact that I was glad not to continue its administration longer on account of the alarming prostration and cardiac depression which existed at the close of the week.

The lady then commenced to take a combination of Fowler's solution and citrate of lithia three times a day before meals in Vichy water in connection with an anti-diabetic diet and saccharin, and her urine has continued at one quarter per cent. of sugar and moderate in quantity ever since, uniformly.—*Four. Am. Med. Assoc.*, June 8, 1892.

**Powers (J. E.) on the Treatment of Incontinence of Urine in Childhood and Youth by Collodion.**—The mechanical treatment to which attention is called is the treatment by collodion. It is most easy of application, occupies scarcely a minute, and can be carried out at school, college, or elsewhere, in perfect privacy. All that is necessary is, while the prepuce, slightly curved up, is held with the left hand, to smear over the little cup thus formed by the extremity of the prepuce with collodion by means of a small camel's hair pencil or blunt end of a penholder. Almost as fast as applied the collodion solidifies. In contracting it draws closely together the edges of the prepuce, and thus the exit for the escaping urine is closed.

A boy of eleven years of age has, after one lesson, been able to use the collodion, and has used it every night carefully and diligently, so anxious has he been to cure himself of what he considered a disgrace. A fortnight's use is sometimes sufficient for the cure. A relapse is easily dealt with. A solution of gutta-percha in chloroform would seem at first sight to be equally applicable, but it is not. The solution of gutta-percha is much longer in hardening, and it possesses no contractile powers. When the child desires to pass water, the little wedge or cap of collodion is easily removed with the finger-nail.

When I first used this collodion application, my expectation was that the bladder would act so forcibly against it as to cause sudden pain, and oblige the patient to

jump at once out of bed and quickly remove the collodion, and that he should then repeat the application before returning to sleep. I was greatly disappointed. There was no pain ; no awakening ; but on rising in the morning the prepuce was found slightly distended with urine, and the collodion was removed without difficulty.—*Mass. Med. Four.*, July, 1892.

**Snow (M. E.) on Apocynum Cannabinum in Dropsy.**—The emesis and catharsis often observed after taking apocynum are probably due to the fact that the *A. androsæmifolium* has been substituted for the *A. cannabinum*. The latter, in suitable doses, acts primarily as a tonic and a diuretic ; when freely given it is emetic and cathartic. As a tonic and diuretic, I regard it as more efficient in the cure of general anasarca, and in removing the accumulation from serous sacs, than all other remedies known to the profession. In atonic dropsy, where the patient is depressed and exhausted, let the medicine be given in small quantity and frequently repeated. If the patient is vigorous and strong and drastic cathartics are suited to the case, then give full doses in combination with acetate of potash.

When the case is not complicated with organic disease of the kidneys, I have invariably found that it acted promptly upon the urinary secretion and produced a radical cure. When incurable cardiac and other organic complications exist, and effusion is the result of debility, it is the only remedy in my hands that has not disappointed me in giving temporary relief, promoting the comfort and prolonging the life of the patient. When stimulants are admissible, gin may be combined with it. Spirit of nitre and acetate of potash will act as valuable adjuncts in stimulating the absorbents to remove large serous accumulations.

The formula for administering this remedy will depend upon the condition of the patient. It may be given in the form of tincture, or as infusion, one drachm of the bark of the root in eight ounces of water. Give half an ounce of the infusion once in six hours.

This vegetable contains, according to analysis, in addition to tannin, gallic acid, and gum resin a bitter principle sold as an alkaloid under the name of apocynin. I have never used this alkaloid in practice, and therefore can give no opinion as to its value

or efficacy in the treatment of the disease in question.—*Mass. Med. Four.*, July, 1892.

**Sympson (E. M.) on Salol in Chronic Cystitis.**—Washing out the bladder needs to be done so very often as to frequently be inapplicable to this class of cases. The desideratum is a drug which can be excreted by the kidneys and make the urine acid, thus preventing fermentation and the formation of mucus and pus. Such a remedy Sympson finds in salol, which he gives in the following mixture :

B	Salol,	3 ij.
	Pulv gum. acaciæ . . . .	q. s.
	Aq. cinnamomi . . . .	q. s. ad. f ʒ xij.
M. S.—Tablespoonful every four or six hours.		

—*Practitioner*, June, 1892.

**Howard (H. P.) on Mistletoe as an Oxytocic.**—The claim is made for this remedy that it causes intermittent uterine action. It is therefore indicated where it is desired to bring on labor, or when pains have ceased from uterine atonicity, etc. The fluid extract may be used in drachm doses at intervals of twenty minutes for four doses.

Several cases are reported confirmatory of the above claims.—*Med. News*, May 14, 1892.

**J. W. C., on Acetanilide Poisoning.**—I was called hurriedly at 7 P.M., February 15th, to see Mrs. M., a married lady about thirty-six years of age, who was supposed to be suffering from an attack of grippe. On arriving I found her in a semi-unconscious state, delirious at times. She had a very feeble pulse, and short, rapid breathing. Her extremities were cold, face and lips cyanotic. She would deliriously call to her watchers to remove the weight from her chest and to give her more air ; all the symptoms pointing to cardiac failure. I immediately gave 1-100 tablet of trinitrin hypodermically, and then gave nitrite of amyl inhalations ; then began giving whiskey and digitalis every half hour. In about an hour consciousness was restored, but she still had fainting spells. I continued the whiskey and digitalis until morning, when she expressed herself as feeling pretty well though quite weak ; in a few days she was all right. On inquiry, I learned that the regular family physician had prescribed for Mrs. M. about noon, before I was called in the evening, for grippe headache, as he called it. He gave her five powders, one of which I secured ; it was acetanilide, 11 grains. Mrs. M. had in-

structions from the doctor to take one of the powders every hour until relieved.—*Weekly Med. Review*, May 21, 1892.

**Short (T. S.) on a Case of Antipyrin Poisoning.**—A professional man who on three occasions during the last twelve months took 5 grains of antipyrin for the relief of headache due to fatigue, on each occasion suffered from a precisely similar train of symptoms, differing from each other only in degree, so that the account of one attack will suffice. On March 5th, 5 grains of antipyrin crystals were mixed with a little water and swallowed; two hours after there was a marked flushing of the face, and four hours after an unpleasant choking sensation was felt in the throat, which passed off in about half an hour, and was followed by redness and swelling of the nose and lip. Within twelve hours a crop of herpes-like vesicles had appeared on the nose, lips, and inside of the cheeks; the hands and feet were swollen, red, and itching, and the skin of the penis and scrotum and the anal margin were in a similar condition. There was a feeling of stiffness, with pain on movement, in the muscles of the neck, shoulders, and back, but no rise in temperature, vomiting, or collapse. The vesicles on the nose and lips discharged profusely, and those in the mouth gave place to small painful ulcers, which entirely prevented any but the very blandest food being taken. Defæcation was also accompanied by very great pain. The symptoms gradually subsided under treatment, but only disappeared by the end of the week, being followed by desquamation in the portions of skin affected. In reviewing the history of the case, it was found that the three occasions on which these attacks occurred were the only occasions on which antipyrin had been taken that year, although previously the drug had been used without any bad result. Fish was thought at first to have been the cause, but this and other articles of diet were satisfactorily excluded.

One point is worthy of mention: each of these attacks followed the exhibition of the drug in the solid form not completely dissolved, whereas on previous occasions it had always been taken in solution, so that it is possible that the irritating effect had been prevented then by sufficient dilution.—*Brit. Med. Jour.*, June 11, 1892.

**Platt (W. B.) on a Case of Bromoform Poisoning.**—A three months' old male baby, strong and healthy, was suffering from pertussis. He was given a solution containing in each drachm dose 2 minims of Merck's bromoform and 10 minims of whiskey in equal parts of syrup and water, to be taken three times daily, and well shaken before each administration.

The mother did not again visit the dispensary until the poisoning occurred two weeks later, May 31st.

She claims to have given the medicine as directed, with no ill effects, except a slight lessening of the appetite, and with a decided diminution of the paroxysms of coughing, until the last dose in the bottle was reached, which was not quite one teaspoonful. This was given at 11.30 A.M.

At 12, noon, the child was noticed to be weak in its limbs, and rapidly became limp and unconscious. The infant was brought to the dispensary at 12.30 in the following condition: Unconscious, cannot be roused in the slightest degree by cold sprinkling of face, shaking, etc.; inspiration shallow, not markedly abnormal in number to the minute; pupils contracted almost to pin point; eyeballs not rolled up as much as in natural sleep; no strabismus; muscular relaxation; no twitching or spasmodic contraction; skin cool, color of skin everywhere pale; no cyanosis or flushing of face; liquids put in the mouth are swallowed very imperfectly; odor of bromoform in the breath. The child has had no stimulant or treatment of any kind before entering the dispensary, or no other medicine than the bromoform solution, according to the mother's statement.

Various restorative measures were given. Stomach washing and aromatic spirits of ammonia were given. The latter improved the respiration, but there was no return of consciousness. Hot packs with cold compresses to the head proved efficacious, and the child recovered after being unconscious one hour and a quarter.

It is impossible to say how much bromoform the child took, or whether it was a cumulative effect of the last few doses.

It is quite likely that the solution was not thoroughly shaken immediately before administration. The liability of bromoform to separate in small globules from the containing medium is well known, unless it contains considerable alcohol or glycer-

ine. This is the only untoward effect I have had after using bromoform in a number of cases of infants and children.—*Times and Register*, June 18, 1892.

**Rolfe (W. A.) on a Case of Colocynth Poisoning.**—Miss M., a delicate young woman of twenty-five, finding herself pregnant, and wishing to induce abortion, acted under the advice of a dress-maker who recommended taking powdered colocynth in hot gin as an infallible remedy.

The amount taken was, as near as I could judge, about a quarter of an ounce of the powdered drug in a half-tumblerful of gin. This mixture was swallowed about ten P.M., and I was called at twelve. On arriving at the house, I found the woman on the floor in a state of collapse. The face was pale and pinched, respirations shallow, and all the extremities cold. The pulse was absent in both wrists. There had been intense vomiting and purging, the later discharges being bloody.

She was placed in bed, and surrounded by hot-water bottles, and given brandy and digitalis hypodermically. She rallied in about an hour and commenced to vomit and purge again, and complained also of great pain in the stomach. A glass of warm water was given with the hopes that it might bring up any of the drug which might still be in the stomach.

Continuing to vomit till she was well-nigh exhausted, I concluded to stop the retching by morphia. Three-quarters of a grain were required to quiet the stomach, the amount being given in a space of half an hour's time. The resulting gastro-enteritis was treated by milk diet, and the administration of powders of bismuth subnitrate and salol.

She made an uninterrupted recovery in about ten days. Strange to say, abortion did not result, as might have been expected from the indirect action on the uterus.—*Boston Med. and Surg. Jour.*, May 19, 1892.

## REPORT ON SURGERY.

BY GERTRUDE KELLY, M.D.

**Rotch (T. M.) on a Case of Double Movable Kidney.**—An unmarried woman, twenty-seven years of age, had been subject to headache for ten years. During the last three years they had increased in severity and frequency. The pain was located in the frontal and parietal regions and was described as throbbing. It was accompanied by nausea and vomiting, which were not believed by the patient to be dependent upon food. Examination of the eyes negative. In December, 1890, she felt something shaking in her abdomen when she waltzed, and near the end of the same month she experienced a sensation as if something slipped forward into the left inguinal region when she stooped over. In the latter part of January, she fell violently upon the ice in a sitting posture. At this time she noticed a resistant mass in the left inguinal region, and shortly after a similar one in the right. Three weeks later they became painful. The pain was always influenced by position and motion, was absent when she lay quiet in bed. Examination of the urine on May 12th showed color normal, reaction acid, specific gravity 1.027, flocculent sediment, no albumen. Examination of the abdomen

revealed in the right lumbar region a tumor which was firm, oval in shape, and apparently three inches by two in size, moderately tender on pressure, easily movable from the crest of the right ilium upwards under the ribs in the axillary line, from which position it was forced downward by coughing a deep inspiration. In the left lumbar region a tumor was found similar in every respect, except that it was larger. Percussion over the lumbar region in the back gave resonance when the patient lay on her face.

Various kinds of apparatus were tried to retain the kidneys in position, but without success, and it was decided to perform the operation of nephrorrhaphy. The first operation was performed by Dr. Burrell on September 22d. An incision was made in the lumbar region on the left side, at the outer border of, and parallel with the extensor muscle of the spine; the dissection was carried down to the kidney, and silk sutures were passed through its capsule and the quadratus lumborum muscle binding them firmly together. The wound was thoroughly irrigated, packed lightly with gauze, and dressed antiseptically. The patient made a good recovery.

On November 7th the second operation was performed by Dr. Bradford. An incision four inches in length was made in the lumbar region in the back over the right kidney, extending from the lower ribs downward at a distance of about six inches from the vertebral spines. The dissection was carried down to the kidney, and three sutures were taken through the capsule at the upper, middle, and lower parts; these sutures were carried through the muscular substance to the outer edge of the wound, and after thorough irrigation an antiseptic dressing was applied. The patient was discharged on December 28th in good general condition, and with the wound healed. The urine chart, kept from September 7th until her discharge from the hospital, showed an average daily amount of about one half the normal quantity.

On February 6th the patient re-entered the hospital on account of a slight discharge occurring from the right side. Examination showed one or two granulating points in the right cicatrix, into one of which a probe entered about one and one-half inches. An incision was made, and a silk suture was found at the bottom and removed. A slight swelling on the left cicatrix was also opened, and a silk suture was removed. On February 21st the patient was examined, and both kidneys were found to be in position. She complained of various nervous aches and pains, but the nausea, sense of weight in the abdomen, and headache were relieved.—*Boston Med. and Surg. Jr.*, May 26, 1892.

**Hawkins (Herbert) on a Case of General Arteritis, with Narrowing of the Abdominal Aorta in a Child.**—The child was aged eleven, and died in St. Thomas' Hospital, it was supposed, from acute nephritis. It was found on the *post-mortem* examination that there was disease of the aorta from end to end, of the common carotid, of the subclavian, and of the internal carotid arteries of both sides. The renal arteries were thrombosed. The disease consisted of gray translucent patches, which showed microscopically a development of uniform cellular tissue between the elastic lamina and the endothelium, and some of the patches showed a deposition of firm white clot upon the endothelium. The spleen showed signs of old disease. For three inches above the bifurcation of the aorta there was a lamina of firm clot nearly closing the lumen. There was also

similar disease throughout the pulmonary arterial system. There was no definite history of congenital syphilis, but two other children had died in infancy, and the case was probably of syphilitic nature.—*British Med. Jour.*, May 7, 1892.

**Vinke (H. H.) on Trephining: Its Indications and Possibilities.**—The following are some of the pathological conditions of the skull and its contents, for the relief of which trephining may be called for:

1. *Fractures.*—The operation becomes imperative in all fractures of the vault, the result of concentrated local violence, where brain symptoms are urgent and persistent. In simple and compound depressed fractures it is often advisable to trephine even if no brain symptoms be present. In these cases the surgeon must be guided by the nature and extent of the injury. Fractures of the bone are only exceptionally amenable to operative surgical treatment. In the treatment of pistol-shot wounds of the head we should content ourselves with removing loose fragments of bone and blood-clots, making provision for free drainage, and treating the wound antiseptically. Probing for the bullet is hazardous, and the locating and removal of the same is scarcely ever practicable. Trepanning is also contraindicated in all fractures the result of diffused injuries, for in these cases simultaneous and more or less extensive lesion of the brain and its membranes as a rule coexists, and an operation would in these cases, therefore, be absolutely useless.

2. *Intracranial hemorrhage and blood-clot.*—When associated with a fracture the latter, as a rule, points to the seat of the hemorrhage or blood-clot. Intracranial hemorrhage, the result of trauma, but not associated with fracture, is at times difficult to locate, but a careful study of the symptoms will usually lead us to the seat of the effusion. It is a well-known fact that the meningeal artery and its branches are particularly liable to rupture, and it should be remembered that hematoma, resulting from rupture of the meningeal artery and its anterior branches, can be reached at a point  $1\frac{1}{4}$  inches behind the external angular process of the frontal bone, and at the same distance above the zygoma. Prof. Krönllein concludes that the "temporo-parietal forms of hæmatomata are most frequent, for the reason that the temporal region is very vulnerable, and that the largest vessels

are here met with. By perforating the skull in the temporal region we gain access to the area of both the diffuse, the temporo-parietal, and the fronto-temporal hæmatomata, and can thus remove the extravasated blood, although here we do not meet the trunk, but only the main anterior branch of the middle meningeal artery. But since the circumscribed parieto-occipital hæmatoma is not accessible at this point, if the first operation prove of no avail, a second opening should be made in the occipital region to meet the vital indications." The indication in all these cases of hemorrhage is to turn out the clot, and arrest the hemorrhage by securing the bleeding vessels, if that be possible, or by plugging. Non-traumatic intracranial hemorrhage has also been trephined for successfully. The history of the case, together with the existence of marked and well-defined local symptoms of irritation, may enable us to arrive at a correct diagnosis and determine the exact seat of the effusion.

3. *Intracranial abscess.*—A history of trauma will usually direct us to the location of the pus. In the absence of a history of injury, the general symptoms together with the presence of a local tender spot, will determine the site of the abscess. There is, of course, but one indication, and that is to give vent to the pent-up pus, whether it be located beneath the bone, within or beneath the meninges, or within the brain.

4. *Foreign bodies which have entered the cranium*—They should be removed when they can be readily located, and whenever this can be done without entailing serious injury to the brain.

5. *Ci. atrices*, the result of old fractures, *caries*, and *necrosis*.—These morbid conditions should be removed as soon as they excite symptoms of irritation.

6. *Intracranial Neoplasms.*—An operation for the removal of a tumor of the brain is only justifiable when the same can be definitely localized and is accessible.

7. *Microcephalus.*—The propriety of trephining for this condition is still *sub-judice*.—*The Med. Fortnightly*, May 1, 1892.

**McCurdy (Stewart Le Roy) on a Modification of Wyeth's Method of Bloodless Amputation at the Hip-Joint.**—An effort has been made to combine what appears to be the advantages of Wyeth's with those of Jordan's method. The Wyeth operation is so modified as to

be performed with one needle instead of two, and always at one sitting.

First draw a line from the most prominent point of the greater trochanter to the perinæum. The needle is entered on this line at a point just internal to the femur, and is passed directly through the thigh, so as to make its exit just below the tuber ischii. Passed through at this point, the needle will be external to all the important blood-vessels, and the only hemorrhage possible will be from the smaller vessels, upon the external aspect of the thigh. A figure of 8 is now made by throwing a round rubber tourniquet around the projecting ends of the needle, over the internal aspect of the thigh, sufficiently tight to destroy femoral pulsation beyond the tourniquet. The flaps are now made, which is followed by disarticulation.

After ligating the blood-vessels the cord and needle are removed and the stump is ready for final dressing. The point of the needle should be guarded, as Wyeth suggests, with a cork.—*N. Y. Med. Four.*, May 7, 1892.

**Davy (R.) on a Case of Bullet Wound of Skull, the Result of Attempted Suicide.**—The man had a small bullet wound immediately over his occipital eminence; there was much swelling around the aperture, and some free hemorrhage. The hair was singed, and the aperture was as large as a No. 3 shot. On careful probing of the wound a loose body could be felt, which was assumed to be a splinter of bone. Ether was given, and a crucial cut made through the wound. A flattened bullet was extracted from a dented bed it had made for itself close to the attachment of the ligamentum nuchæ and the complexus muscles. The bullet was blood-stained, and some fibrous shreds adhered to it. The man was dull and morose but made an excellent recovery.—*The Lancet*, May 21, 1892.

**Cooper (W. A. Duncan) on a Case of Prolonged Constipation; Passage of Gangrenous Gut; Recovery.**—Mrs. W., aged twenty-four, who gave a history of previous constipation, was seven days without having had a movement of the bowels. An enema of soap and water was ordered, but had no effect: the usual purgative treatment gave a negative result. The obstruction continued for five weeks, and as an operation was not allowed Dr. Samuel Fenwick was called in. Nothing



of importance could be made out, with the exception of large masses of scybala; no tumor could be discovered. At Dr. Fenwick's suggestion a piece of rubber tubing two and a half feet in length was inserted into the rectum and an enema passed up by this means. This treatment was continued for a week. Symptoms of peritonitis supervened; after keeping the patient under the influence of morphine by the hypodermic method, they subsided. The constipation still remained, however, and eighty-four days after coming under treatment, when the patient appeared to be getting stronger, an enema of five pints of soap and water was administered. This she retained for half an hour, when she passed a piece of intestine three and a half inches in length, evidently from the ileum. This was followed by a very copious motion, consisting of scybala and mucus.

I believe this to be the longest case on record with complete obstruction when recovery took place.—*British Med. Jour.*, May 14, 1892.

**Somers (Geo. B.) on a Case of Gun-shot Wound of Head; Recovery with Bullet in Brain.**—E. C., was struck in the forehead by a bullet from a parlor rifle—in the hands of a playmate who was at a distance of about ten feet. The wound was an inch to the right of the median line, and just within the hairy portion of the scalp. He was removed to the City Receiving Hospital, where he was found to be perfectly conscious, suffering but little pain, and exhibiting no brain symptoms. An examination of the wound, however, showed that the bullet had penetrated the skull. The boy was placed under chloroform, the scalp wound enlarged, and two buttons trephined from the edge of the opening with the view of giving the brain as free drainage as possible. The inner table was found to be fractured for at least half an inch beyond the edge of the opening in the outer table. All fragments of bone were removed, and the rough edges smoothed off. During the operation much clotted venous blood, mixed with a considerable quantity of broken-up brain matter, was discharged through the opening in the dura mater. Just how much brain matter came away, it is impossible to say, but it seemed to be as much as two teaspoonfuls. The wound was now explored with a bullet probe, which was

allowed to find its way along the passage. After entering about three inches it stopped. The bullet could not be felt by manipulating the probe, and deeming further interference useless, the wound was prepared for dressing, a gentle stream of water was directed into the canal, and all blood and detritus washed away. A drainage tube was inserted as far as it would go, and the wound closed and dressed. The next day the boy's condition was so good that it was deemed safe to remove him to his home. On the third day he was somewhat restless, temperature 101° F., but there was no particular pain or other symptom. It was thought best to redress the wound, and remove all sutures, so as to prevent the possibility of pressure from any accumulating discharge. In a day or so after the sutures were removed, a pulsating meningo-cerebral tumor, covered with bright red granulations, and about as large as a walnut, gradually formed and protruded from the wound. From this time on the process of healing was interrupted. The granulations gradually receded within the cicatrix, and one month after the accident were no larger than a small pea. Up to this date not the slightest mental or physical symptom had appeared.—*Occidental Med. Times*, April, 1892.

**Tirard on a Case of Abnormality of the Intestine.**—W. C., aged three years and five months, was admitted into the Evelina Hospital with cardiac disease, which caused his death. At the *post-mortem* examination, on opening the abdomen, the vermiform appendix was observed to be lying immediately below the right lobe of the liver, in the position normally occupied by the gall-bladder. On separating the coils of smaller intestines from the liver the ileum was found running into the cæcum, which was attached by a distinct omentum to the edges of the fissure for the gall-bladder, the bladder itself lying between the two layers; from the cæcum the large intestines ran in an oblique direction to the left iliac fossa, where it made a sharp bend to the right, and passed behind the coils of small intestines to the right iliac fossa, from which point, after making a gentle curve, it descended on the right side of the pelvis to the anus. A congenital constriction of the pulmonary orifice was also found, together with the ordinary signs of mitral disease.—*The Lancet*, May 21, 1892.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

**Ohman-Dumesnil on Double Chancre "à distance" and Syphilitic Auto-Inoculation.**—The author considers the subject of prime importance because, could it be proven that syphilitic auto-inoculation is possible during a certain limited period, it would conclusively prove that the disease is still localized, and attempts to jugulate syphilis by means of early excision of the primary lesion would become reasonable. He cites two cases of double chancre, both cases presenting a chancre upon the prepuce and another upon the lower lip. Both cases present induration of lymphatic glands situated near the primary lesions, and both cases after proper treatment show spontaneous and simultaneous cure of both chancres. Apart from the fact that the patients deny the possibility of auto-inoculation, the lips in both having been fissured at the contraction of the chancre, the author thinks that the simultaneous disappearance of both chancres in each patient would prove the impossibility of auto-inoculation, though the distance of the lesions, one from the other, would make the cases rare ones.

Adding authoritative evidence as to the impossibility of auto-inoculation of syphilitic induration, and bringing forward the cases where excision of the primary lesion was still followed by the secondary eruption and general symptoms of secondary syphilis, the author weighs this evidence against that of Mracek and Pontoppidan's experiments, according to which auto-inoculation is not only probable but possible and actual. A critical analysis of these experiments destroys to his mind their value. The objections raised being primarily that pus has been used in the inoculations, and secondarily where an induration has appeared no corresponding induration of the lymphatic ganglia which should anatomically be connected with the artificially produced lesion has been shown to exist. The author therefore concludes upon analysis of all the points in consideration that : 1, the probability of auto-inoculation in early syphilis has not been proven ; 2, while there may be strong presumptive evidence in favor of it, it is only at best a possibility ; 3, the most crucial experiments prove that excision of the chancre at the earliest possible moment is

futile and falls short of its purpose ; 4, in multiple chancres *à distance* the lesions are due to the same inoculation, as a rule ; 5, in multiple chancres of different ages it is probable that the younger lesions are merely irritative sclerosis ; 6, experiments so far apparently prove that syphilis is constitutional at the time the initial sclerosis makes its appearance.—*St. Louis Clinique*, May, 1892.

**Green-Stick Fracture of the Penis.**

—Dr. Williams (George Herbert) reports a case of fracture of the penis and the successful treatment of it. The conditions of the fractured penis where he was summoned were as follows : Blood escaping from the urethra, the sheets and patient's hands soiled with blood, and the penis arched toward the left with a distinct sulcus midway between the symphysis pubes and the glans, the whole organ very much engorged, more especially the right corpus cavernosum, and the skin of a darkish blue color. The patient gave the history of an old stricture, which he had been treating with Ag. No. 3 bougies, under medical advice. The accident was produced by forcibly turning down the extremely engorged member under the left thigh.

The treatment conducted was : Emptying the bladder by English gum elastic catheters, then fearing sloughing, the member was incised in fifteen different places, mostly on the right side, then dusted with iodoform and enveloped in linseed poultices, which were changed every two or three hours, the privates being raised on a pillow. After a few days poultices were discontinued, and a salve of iodoform 3 j to lanolin 3 j was used. During the treatment the escape of urine through an unclosed incision on the right side necessitated the use of a full-sized rubber catheter and emptying the bladder three times a day. On the fifteenth day the patient left his bed still continuing the use of the iodoform ointment. The hemorrhage from the urethra, the escape of urine through the wound, and the peculiar bending of the organ would lead the author to conclude that this was practically a green-stick fracture of the penis, with a rent of the urethra on the side of the convexity.—*Med. Rec.*, March, 1892.

**Béclère (M.A.) on Gonorrhœal Rheumatism in Children.**—The author presents two cases which have come under his observation. The first is that of a little girl five and a half years old. The child was brought for treatment to the dispensary of which Béclère has charge, suffering from articular rheumatism complicated by tendinous synovitis of the extensors of the left wrist. The symptoms were similar to those which are often met with in articular rheumatism following gonorrhœa, but the age of the patient did not permit to make this diagnosis at once. On further examination, however, the patient was found suffering from a vulvo-vaginitis, the surface of the vulva being covered by a thick greenish pus, abounding in micro-organisms, among which, however, Neisser's gonococci have not been found. The child was sent to the Children's Hospital under the care of M. Ollivier, who confirmed the diagnosis of gonorrhœal rheumatism on the clinical evidence which the patient presented. On closer inquiry it was found that the child was infected by a young lad of seventeen, who suffered from a gonorrhœa. The second case is that of a child still younger than the first, a girl of twenty months. This case presented a tibio-tarsal arthritis of a bad nature, with the presence of an extensive œdema and a rose-red coloration of the integument. Again having clinical evidence of a gonorrhœal rheumatism, the author searched for its origin, and found in this new patient a vulvo-vaginitis where a thick greenish pus was present, leaving spots upon the child's shirt. This exudation of pus was found to have been present for two months, and accompanied by frequent and painful micturition. Upon inquiry it was found that similar spots have been on the linen of the mother, and thus evidence is brought that the vulvo-vaginitis in the child has been accidentally transmitted to it from the mother. Taking into consideration the clinical evidences of both cases and the characteristics of both diseases, it must be concluded that they are gonorrhœal rheumatism, the latter of a non-venereal origin. This kind of gonorrhœa transmitted from the sick to the healthy accidentally, unconsciously, innocently, the author terms, together with M. Aubert, "gonorrhœa insontium," similar to "syphilis insontium," transmitted in the same way. Examining the literature on the subject, and noting the cases reported

by Koplik in the *N. Y. Medical Journal* of June 21, 1890, and of Deutschman in the *Archiv für Ophthalmologie* for 1890, the author arrives at the following conclusions: The exanthemata have been observed in 65 of 88 cases as follows: 34 were maculous; 11 papulous; 19 maculo-papulous; 1 pustulous; 1 ulceration of soft palate, periostitis, and enlargement of lymphatics. The complications were 2 iritis and 2 periostitis; in all condyloma ad anum and genitalia were present. The constitutional phenomena are similar to those which follow primary sclerosis of the genitals. The treatment is also similar, inunctions having been used nearly in all cases.—*The Medical Press*, May, 1892.

Gonorrhœal rheumatism presents itself in three different etiological forms:

First, gonorrhœal ophthalmia, in the newborn especially; second, gonorrhœal vulvo-vaginitis following attempts at rape; and lastly, perhaps the most frequent etiologic mode, which is the least recognizable, is gonorrhœal vulvo-vaginitis of non-venereal origin dependent upon involuntary, accidental, and innocent contagion.—*Annales de Dermatologie et de Syphilographie*, May, 1892.

**Lang on Tuberculosis of the Urethra.**—The writer observed a case of urethral tuberculosis, which involved the bladder and the vesicæ seminales. Upon the glans a very bad tubercular ulcer, forming a deep funnel, penetrated into the urethra for a distance of about one and a half centimetres, making a large tubercular papule evident. The endoscope has shown cicatrices and ulcerations on mucous membrane of the whole length of the urethra.—*Annales de Dermatologie et de Syphilographie*, May, 1892.

**Henry (R. F.) on Tumor of the Urethra.**—The writer reports a case of a woman to whom he had been summoned, the patient complaining of great pain in the genital organs during coitus and when she was in the sitting upright posture. On examination a free end of a tumor simulating a drop of blood in size and color was discovered. This was extremely sensitive to the touch. The other end of the tumor was found to be attached to the mucous membrane of the anterior part of the urethra. The tumor was about three-eighths of an inch in length, one-eighth of an inch in breadth, and about one-sixteenth of an inch in circumference. It was soft

and more or less globular. There was no, or very little, urinary obstruction, but great pain and trouble due to pressure from without. The treatment of the case consisted in excising the tumor with curved scissors. No hemorrhage of any amount followed. A wash of carbolized water was then used, thus completing and curing the patient.—*Western Medical Reporter*. June, 1892

**Neumann (of Vienna) on Extra-Genital Syphilis.**—The author reports 88 cases under his observation and treatment, arranged in the following table, which shows the situation and frequency of the sore.

Site of Sclerosis.	Males.	Females.
Upper lip.....	6	12
Under lip.....	9	19
Angles of mouth.....	6	2
Cheek.....	1	1
Chin.....	4	1
Posterior pharynx and palate..	1	—
Tonsils.....	—	2
Angles of nose.....	2	1
Eyelids.....	2	—
Fingers and hand.....	6	5
Nipples of breast.....	—	4
Navel.....	—	1
Anus.....	—	3
	37	51
	88	

The total number of extra-genital cases recorded in our literature is 613, with a wide variation in the site of the initial sclerosis.

The mode of contracting the primary sore is not well known in all cases, but in those of the upper lip nearly all have been contracted by kissing. On the lower lip kissing and the indiscriminate use of utensils has been the cause. At the angles of the mouth one has acquired his sore by smoking the end of a cigar used by a syphilitic. On the cheek kissing was the cause. On the chin shaving was assumed as the cause of infection. On the tonsils the use of a spoon was supposed to be the cause. At the angle of the nose the sore appeared to be due to scratches made by fingers which had previously cleaned and bathed syphilitic patients. The navel sore was due to infection from the mother, who acquired syphilis during the eighth month of pregnancy. From the above it is evident that extra-genital syphilis is proportionally oftener acquired in those innocent ways, as French and Russian investigators have statistically proven. Thus Fournier has affirmed that one fourth of the syphilis

observed has been found in persons innocent of their acquisition, and Belousson (Russia) has shown that of 2,765 syphilitic cases only 26 per cent. were acquired by coitus, 5.4 per cent. hereditary, 2.2 per cent. by suckling, and 63 per cent. by other means.—*Med. Press and Circular*, June, 1892.

**Cooper (Arthur) on Modes of Treatment which Interfere with the Diagnosis of Syphilis.**—The author thinks that certain modes of treatment of venereal sores obscure the diagnosis of syphilis, and thus do great harm to the patient as well as to the physician, keeping him in a state of uncertainty as to diagnosis. This mode of treatment is threefold:

1. The application of irritants, chiefly nitrate of silver, to a doubtful sore.
2. The application of irritants, chiefly iodine paint, to the groins; and
3. The untimely administration of mercury.

To illustrate what is meant the writer supposes a case with some venereal sore applying for treatment, and having reason to ask for "something to be done at once." The application of nitrate of silver to the sore is undertaken, which sets up an irritation and inflammation, and often produces phymosis as well. Then if enlargement and tenderness of the inguinal glands follow, something in the form of painting the groin with iodine is done, which produces hardening of the superficial layer of the skin, thus obscuring the real state of the gland. Sometimes suppuration of the glands is produced by this mode of treatment; and, lastly, the patient, insisting to have mercury, being convinced of suffering from the worst possible disease, gets it: the mercury may so modify the consequent appearance of the secondary lesions of syphilis that a correct diagnosis will become impossible. The patient, either disgusted or tired of treatment, may give it up, feeling sure of being healthy, marry, and thus propagate syphilis; or he may apply to ask as to whether he should or should not marry, and on the evidence of his history no conclusion can be drawn. His history is almost worthless. This, then, concludes the author, is what should prompt every physician to refrain from applying this treatment until positive evidence of disease and confirmation of diagnosis is established.—*Lancet*, May, 1892.

**Bangs (L. Bolton) on Some of the Effects of "Withdrawal."**—The author elicits a few very significant results of "withdrawing" at the act of copulation, used by many as a preventive to conception. The old dictum, "The breaking of a law of nature brings its own punishment," the author confirms by illustration of two cases.

One, a young man of thirty-three, of moderate habit, is five years married, his wife having had no children. He confessed to have used withdrawing as the preventive, and complains of having had attacks of pain in one or the other testicle for the last two years. Sometimes these pains are felt in the groins and across the sacrum. He has never had any venereal disease, and his urethra is free from stricture, and though there is no tenderness of the prostate in examination per rectum, still there seems to be an increase in the density of the organ. This patient was completely cured by enjoining a normal and natural intercourse. Another patient has been married twenty-three years, had two children, the youngest being sixteen years. For that period he has practised "withdrawing" as a preventive. He complains of having had a "full" feeling and in-

tensely severe pain in both testicles, burning sensation along the perineum and about the anus. He had no venereal disease and his urethra is free from stricture. His prostate is very sensitive to slight pressure, and is of increased density. His urine contains abundant flakes and shreds, which indicate the presence of chronic posterior urethritis. The endoscope shows a "raw beef" appearance of the mucous membrane of the deep urethra. This case confirms what the author supposes to be a psychological result of "withdrawal," namely a disgust with one's self and with one's wife. He says: Treatment in this case has been difficult and one must guard against using a treatment that would be appropriate to an inflammation of the deep urethra of gonorrhœal origin, especially solution of nitrate of silver, as this rather aggravates the inflamed condition due to the cause acting in these cases. Both cases, according to the author, prove that in proportion to the length of time in which the method of prevention has been used the condition approaches nearer and nearer to a chronic inflammation of the deep urethra, and this is especially proven by the last case.—*The Southern Clinic*, June, 1892.

## REPORT ON DERMATOLOGY.

BY CONDUCT W. CUTLER, M.D.

**Shoemaker (J. E.) on Medicated Soaps.**—Properly made and properly applied potash or soda soaps often render efficient assistance in the treatment of diseases of the skin. The fact must not be overlooked, however, that like all other active agents, they are capable of effecting harm when improperly used. They must not be carelessly prescribed without regard to the nature of the ailment, stage of disease, condition of the patient, etc. Soap has a decided position in dermato-therapy. It would be, however, irrational to expect too much from these preparations. They are to be looked upon as valued assistants only, seldom able, unaided, to effect a cure; more than this ought not to be anticipated. By not expecting benefit from their use beyond their power as assistants we learn to employ them with judgment and guard against disappointments from their failure, in cases to which they are not adapted.

The super-fatted soap introduced by Unna, of which mention was made when speaking of toilet soaps, is now made by the addition of a mixture of lanolin and olive oil instead of olive oil alone as formerly recommended. The proportions in which these ingredients are now mingled with the soap mass are two per cent. of lanolin and three per cent. of olive oil. The presence of lanolin, a soft animal fat with no tendency to become rancid, of ready absorption by the skin and miscibility with water, confers additional value upon the product. A higher percentage of lanolin, however, diminishes the lathering property.

Various medicinal agents have been incorporated in this super-fatted article and employed by Unna, Eichhoff, and others, who report very favorably of their advantages. From the lists and reports lately issued by the latter authority I have

selected the following as an addendum to the present paper :

*Aristol Soap*, two per cent. of aristol.

This is recommended in psoriasis, eczema, leg ulcers, ulcerated lupus, and gumata.

*Benzoic Soap*, five per cent. of benzoin.

A good toilet soap, useful in intertrigo and seborrhœa of the scalp.

*Creolin Soap*, five per cent. of creolin.

Creolin soap is of benefit in the treatment of scabies and contagious impetigo.

*Creasote Soap*, two per cent. of creasote.

This preparation may be used in lupus.

*Hydroxylamin Soap*, three per cent. of hydroxylamin.

Adapted to the treatment of lupus, psoriasis, tinea, and parasitic sycosis.

*Iodoform Soap*, five per cent. of iodoform.

Iodoform soap is beneficial in chronic and syphilitic ulcers. When used in conjunction with massage it may promote the absorption of exudations.

*Iodol Soap*, five per cent. iodol.

An effective substitute for iodoform soap.

*Menthol Soap*, five per cent. of menthol.

Especially indicated in paræsthesia and urticaria.

*Menthol Eucalyptol Soap*, five per cent. of menthol with three per cent. of oil of eucalyptus.

A beneficial soap in rheumatism, gout, neuralgia, urticaria, itching of the skin, and as a disinfecting soap to wounds and ulcers.

*Pine-Needle Oil Soap*, ten per cent. of pine-needle oil.

This is a valuable remedy in tinea, favus, eczema, psoriasis, and, assisted by massage, in chronic rheumatism.

*Quinine Soap*, five per cent. of quinine.

A mild stimulant soap in acne, after and during fevers, in dandruff or seborrhœa of the scalp.

*Resorcin Soap*, five per cent. of resorcin.

Of utility in seborrhœa, eczema and erysipelas.

*Resorcin-Salicylic Soap*, five per cent. of resorcin and three per cent. of salicylic acid.

A useful soap in acne, seborrhœa, and in parasitic skin diseases.

*Resorcin-Salicylic-Sulphur Soap*, five per cent. of resorcin with three per cent. each of salicylic acid and sulphur.

*Resorcin-Salicylic-Sulphur-Tar Soap*, five

per cent. of resorcin with three per cent. each of salicylic acid, sulphur, and tar. The two last named soaps are serviceable in eczema, psoriasis, and parasitic skin diseases.

*Salol Soap*, five per cent. of salol.

This is an effective soap to employ in chronic eczema, psoriasis, acne, excessive secretion of perspiration, and in fœtid sweating.

*Salicylic-Creasote Soap*, five per cent. of salicylic acid and two per cent. of creasote.

A valuable soap for chronic eczema, psoriasis, and in excessive secretions of perspiration in different parts of the body.

*Sulphur-Camphor Peruvian-Balsam Soap*, five per cent. of sulphur, and three per cent. each of camphor and Peruvian balsam.

A useful soap in acne, seborrhœa, chronic eczema, and psoriasis.

*Sulphur-Salicylic Soap*, five per cent. each of sulphur and salicylic acid. An especially serviceable soap in all chronic skin diseases, as eczema, psoriasis, ichthyosis, acne, and rosacea.

*Sulphur-Salicylic-Tar Soap*, five per cent. each of the preparations named.

A valuable combination in all chronic skin eruptions.

*Thiol Soap*, five per cent. of thiol.

A beneficial soap in all parasitic diseases, also useful in eczema, acne, and rosacæa.

Other remedial agents and several combinations of medicaments have been used, but they are such as have been described in the foregoing portions of this paper and therefore need not be repeated. According to the nature of the disease, its severity and obstinacy, or the condition of the patient, the surface may be simply irrigated with the soap solution, the froth may be permitted to dry *in situ*, or it may be retained by means of impermeable dressings.—*Journal Amer. Med. Assoc.*, April, 1892.

**Furuncles.**—An ointment of one part red oxide of mercury in one hundred parts of lanolin is said to be very efficacious in aborting furuncles. It should be rubbed in for three or four minutes at a time, once or twice a day. The same application is useful in panaritium.—*N. Y. Med. Record*, May 21, 1892.

**Creoline in Eczema.**—Dr. Löwen-gard has found great benefit in eczema from the use of a two per cent. solution of creoline. In one case reported in *Gyógdszat*, a

complete cure was obtained in three weeks of an obstinate seborrhœa in a six-months' old child, which had resisted all the ordinary modes of treatment.—*N. Y. Med. Record*, May 21, 1892.

**Erythema Nodosum in Children** is treated successfully by Dr. Crenztz (*Aertzlich. prakt.*, No 37, 1891) with antipyrin, in dose of one decigramme for each year of the child's age, three or four times each day. From eight to fourteen days brought about a cure. In adult cases gramme doses can be given.—*Medical Record*, May 21, 1892.

**Owen (Dr. F. W.) on Petroleum Emulsion in Skin Diseases.**—For some time Dr. Owen has been employing a coal-oil emulsion as a local application in eczematous and other skin affections attended with itching. It does not obtund the sensibility of the hyperæsthetic tissues in manner and degree like carbolic acid, but it is free from the unpleasant odor of the latter. As an excipient for some of the usual skin medicaments it may be used advantageously. Alone, it varnishes and soothes the sensitive surface, and if not always curative is at least a valuable adjuvant to other treatment. Besides being quite innocuous, it is, in my opinion, antimicrobial and is unaffected by lapse of time and contact with the body.—*Medical News*, May 7, 1892.

**Jameson (W. A.) on Antimony in Skin Diseases.**—Dr. Jameson, after a careful study of the use of antimony in skin diseases, sums up as follows :

1. Antimony lowers temperature in some conditions of the skin associated with hyperæmia and dryness of the surface, to a well marked extent.

2. So far as our observations go, its influence on tissue waste, as estimated from the amount of urea excreted, or on fluid loss by the kidneys, is not, under the circumstances detailed, a noticeable one.

3. It softens the skin, imparting increased succulence to its cells, augments insensible perspiration, improves the nutrition of the integument, diminishes hyperæmia, and lessens the tendency to premature and excessive epidermic exfoliation.

4. While advantageous in the early congestive stage of acute eczema, it is contraindicated during the period characterized by oozing—the second stage of Brocq, that of rupture of vesicles,—though it may again prove serviceable at a later era—the fourth stage of Brocq, that of successive desqua-

mations. We have found this borne out by our experience of a case of eczema treated with antimony, at present in the ward.

5. If Mr. Morris is right, as he probably is, that it is likely to be of special use in cases where there is a functional nervous cause, it may prove of value in diffuse scleroderma, and possibly in myxœdema.

6. As compared with arsenic, authors are pretty generally agreed that the latter is valueless in conditions of the pityriasis rubra type,—whether by this exfoliative dermatitis in its dry forms alone is meant, or if pityriasis rubra pilaris is included

7. Arsenic restrains the tendency to form bullæ in dermatitis herpetiformis and pemphigus, and sometimes cures psoriasis if stationary or a first attack ; but on the other hand, it may apparently sometimes convert a psoriasis into a pityriasis rubra.

8. Arsenic in some cases renders the skin muddy, dull, and earthy, or deeply pigmented ; it may induce the formation of horny warts on the fingers, or thicken the epidermis of the palms, giving rise to a keratosis, which again may pass on to epithelioma. Such results have not so far been found to follow the administration of antimony, nor are such likely to accrue.

9. The action of antimony may be contrasted with that of pilocarpine. Pilocarpine produces a copious perspiration for a brief portion of the twenty-four hours ; antimony bathes the epidermic cells continuously in a gentle moisture. Pilocarpine lessens or cures a pruritus in a dry, atropic, anæmic, senile skin, by flushing the emunctories, but its rapid stimulant effect is not suited for cases of active hyperæmia, which are more amenable to the influence of antimony. Both improve secretion and aid in the deposit of subcutaneous adipose tissue.—*Edinburgh Med. Jour.*, Jan., 1892.

**Elliot (Dr. G. T.) on Dermatitis Herpetiformis.**—The analysis of eight cases of dermatitis herpetiformis contained in a paper by Dr. Elliot and the data furnished by their clinical histories allow him to formulate the following conclusions:

1. That in the production of the dermatosis there are two factors in operation—a predisposition of itself not productive of the process, and an exciting cause capable of provoking the disease on account of the existence of the former.

2. The predisposition, present by nature

or acquired through the influence of various causes, is constituted by a state or condition other than normal of the nervous system.

3. The exciting factor need not be a constant one, but may be of the most various character, nature, or intensity, its power to call the disease into existence being, however, dependent upon the state of predisposition of the patient. As a result of these conclusions, I would therefore regard dermatitis herpetiformis *not* as a specific disease, always the product of a single or specific agent or cause, but as the outcome of any number of causes of the most various character acting upon an individual possessing a certain degree of predisposition.

It appears to me that if we take the dermatosis upon this broad pathological basis, we can understand the contradictions in origin met with in successive cases and their apparent entire want of agreement. It can not be expected that the predisposition would always be of the same degree, but it probably varies within wide limits, so that in one case an intense exciting cause, while in another only a slight one, would be necessary to produce the disease.

In view of the data derived from the study of the ætiology of the cases conjoined with the clinical and pathological course of each, I do not see what other conclusion could be made by me but that the process is a dermatoneurosis. While the patients were under my care and observation, it was constantly shown that the cutaneous phenomena were peculiarly and altogether subservient to every influence which acted in any way upon the nervous system, or which produced a nerve disturbance of some kind or other, and that it was independent of those which acted upon other portions of the general economy. Every mental or moral shock or emotion of whatever grade, worry or anxiety, excitement or fatigue, mental activity and work, etc., were regularly followed by an increase in the objective and subjective symptoms or were productive of a fresh relapse.

In conclusion, I would add a few words in regard to the treatment of the disease. My experience has certainly demonstrated to me that there is no remedy, drugs, or forms of treatment which exercise any specific influence over the process. On the contrary, the few good results obtained by me have been only in those cases in

which there was an opportunity of either removing or of counter-acting the ætiological influences which had been at work, and it appears to me that the course of treatment adopted should be based upon that principle. I have not seen any particular benefit derived from dietary changes, from internal remedies, or from the routine administration of alkaline treatment, or nerve sedatives, or tonics, etc., as long as the primary influences operating upon the patient continued.

From this experience, the course of treatment which should therefore be followed ought, in my opinion, to be based upon the broadest principles and, as far as possible, guided and directed toward removing all of those influences which apparently produced the disease in any given case, and which brought about the occurrence of relapses. If this can be done by appropriate internal treatment, then the remedy indicated should be exhibited, or, if it requires change of scene, surroundings, occupations, etc., then recourse should, as far as possible, be had to these. At the same time, any functional or other systemic disturbances should be attended to, and the patient's condition be brought as far as possible up to the normal. In other words, the therapy of every case will have to be based upon the indications and conditions existing in each, and can therefore in no particular be a specific one or consist of any specifics.

The external or local treatment is also of great importance, and should be combined with the one just mentioned. Its principal object, in my estimation, is to give relief to the subjective discomfort, to remove the lesions already existing, and to prevent septic infection, which, on a surface presenting so many points of entrance as the scratched and torn and denuded skin of a case of dermatitis herpetiformis would occur most easily. I have tried to attain these ends with the tars, carbolic and salicylic acids, camphor, resorcin, menthol, chloral, ol. hyoscyami cocti, etc.; the sulphur treatment recommended by Dr. Duhring has also been used by me; but none gave results in any way commensurate with that obtained from ichthyol, and the majority failed altogether to be of any use. The ichthyol in ointment form did not act as well as when used as a lotion—twenty-five grains to fifty grains in an ounce of water; but the best effects were observed



when it was combined with ol. amygdal. and lime water:  $\mathcal{R}$  Ichthyol. ammon., gr. xxx to xl; ol. amygdal. exp., liq. calcis,  $\mathfrak{a}\mathfrak{a}$  3 ss. This was rubbed in thoroughly several times daily and allowed to remain on the surface, or sheet lint saturated in it was wrapped around and retained in place by bandages. The treatment was also combined with frequent baths of starch, or of starch and bicarbonate of sodium, to which, in case there was much hyperidrosis, as was at times observed, a decoction of white-oak bark was added. By these means the patient obtained at least considerable comfort, even though they did not act as distinctly curative agents.—*N. Y. Med. Journal.*

### Shoemaker (J. V.) on the Hair.—

#### SINGEING THE HAIR.

Falling of the hair from malnutrition may also be checked by what is called singeing. This process consists in drawing out the split and ragged ends by means of a coarse-toothed comb, and applying to them a lighted taper. The dead end is burned away, and the fire is extinguished as soon as it comes in contact with the teeth of the comb. Singeing seems to exalt the nutritive condition of the hair, probably by hermetically sealing the ends, and retaining within the shaft the fluid upon which its sustenance depends. Whatever be the explanation, I have in many cases seen benefit result from this procedure. It may be repeated when the ends again show signs of death.

If the hair of scalp and beard were more generally made the subject of professional advice, and its toilet were more intelligently performed, premature baldness would be much less common. The loss of nature's protection cannot but be a source of regret to men. The deprivation of nature's ornament justly causes distress of mind to women.

#### MASSAGE, OR DRY SHAMPOO.

A crude species of massage is practised by the barbers under the name of the dry shampoo. This custom is, for the reasons given, of service in maintaining the hair in a healthy condition. The dry shampoo is performed by manipulating the scalp with the finger-tips, drawing it up between the thumb and fingers, and moving it backward, forward, and from side to side upon the cranium. After these movements it is

usual to wash the parts with a slightly stimulating fluid, such as equal parts of water and alcohol, with the addition of a small quantity of ammonia solution. Finally, the hair is carefully dried by means of a towel.

The following prescriptions for the hair have been tried many times, and found to be especially useful.

$\mathcal{R}$  Balsam. Peru. .... 3 ss.  
Beta-naphthol. .... 3 j.  
Lanolin. .... 3 vj.  
Adipis benzoinat. .... 3 ij.

M. ft. ungt.

For dandruff.

$\mathcal{R}$  Resorcin. .... 3 ss.  
Glycerin.,  
Sp. myrciæ. ....  $\mathfrak{a}\mathfrak{a}$  f 3 iv.

M. ft. sol.

For baldness.

$\mathcal{R}$  Tr. cinchon. co. .... f 3 j.  
Tr. benzoin. co. .... f 3 ij.  
Glycerin. .... f 3 j.  
Sp. odorat.,  
Aque. ....  $\mathfrak{a}\mathfrak{a}$  f 3 ij.

M. For dandruff.

$\mathcal{R}$  Potass. carb. .... 3 j.  
Aq. ammon. .... f 3 vj.  
Tr. cantharid. .... f 3 iiss.  
Ol. myrist. .... gtt. xii.  
Sp. odorat. .... q. s. ad O ss.

M. ft. sol.

For dandruff.

$\mathcal{R}$  Hydrarg. chlor. corros. .... gr. xv.  
Glycerini. .... f 3 ij.  
Sp. myrciæ. .... f 3 iv.  
Ol. geranii. ....  $\mathfrak{m}$  xvj.  
Aque. .... q. s. ad O ss.

M. ft. sol.

For general thinning and loss of hair.

$\mathcal{R}$  Salol. .... 3 ss.  
Acid. tannic. .... 3 j.  
Balsam. Peru. .... 3 ss.  
Lanolin. .... 3 ss.  
Adip. benzoinat. .... 3 j.

M. ft. ungt.

For dandruff.

$\mathcal{R}$  Acid. borici. .... 3 ss.  
Hydrarg. chlor. corros. .... gr. xx.  
Glycerini,  
Aque. ....  $\mathfrak{a}\mathfrak{a}$  f 3 iv.

M. ft. sol.

For loss of hair.

$\mathcal{R}$  Acid. borici. .... 3 ij.  
Glycerini. .... 3 ij.  
Sp. vini gall. .... 3 iv.

M. For general thinning and loss of hair.

$\mathcal{R}$  Acid. salicyl. .... 3 j.  
Resorcin. .... 3 ij.  
Lanolin. .... 3 vj.  
Adipis benzoinat. .... 3 ij.

M. ft. ungt.

For baldness.

—*The Medical Bulletin*, April, 1892.

**Brown (Dr. B. B.) on Treatment of Eczema.**—The local agents in inveterate cases of eczema that have given me the most uniform satisfaction compose the following combination :

℞ Lanoline.....	℥ i.
Albolene.....	℥ i.
Sulphur sublim.....	℥ ij.
Aristol.....	℥ ij.
Ungt. pix liq.....	℥ ij.

The faithful application of this ointment night and morning has served in my practice in the past few years to cure more cases of inveterate eczema than any other local remedy.

In inveterate eczema of the scalp a different method of treatment is necessary. After experimenting with a variety of local agents, I have found the following lotion by far the most certain :

℞ Ol. ricini.....	f ℥ iv.
Bay rum.....	f ℥ ij.
Acid. salicyl.....	℥ ij.
Resorcine.....	℥ i.
Quinine sulphat.....	grs. x.

This very active parasiticide is to be applied over the scalp night and morning, and rubbed into the skin. I believe that perseverance in the use of this remedy will

not only relieve most cases of this kind but will promote the growth of the hair.—*Maryland Medical Journal*, April 16, 1892.

**Dr. Hutchins on Ringworm.**—Dr. Hutchins believes the most valuable remedy in ringworm of the body is the following :

℞ Acid. pyrogallic.....	gr. xv.
Collodii.....	℥ i.

M. Sig. Paint on often enough to keep lesions covered.

The few cases of ordinary ringworm of the skin and the larger number of scroto-femoral ringworm have all yielded quite promptly to this treatment. It may require to be weakened or increased in strength, according to the quality of skin upon which it is used. Whether the irritative action of pyrogallic acid does the work or the occlusion of air by the collodion, or whether the former destroys the fungus, I do not know.

For ringworm of the scalp I have used bichloride of mercury, one to two grains, kerosene oil one ounce. This combination was mentioned to me by Dr. Elliot, of New York, last spring, and he reported excellent results from its use in institution practice.—*Maryland Medical Journal*, May, 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

**Brannan (J. W. and Cheesman (T. M.) on a Study of Typhus Fever.**—The material was drawn from the recent epidemic in New York City. Out of one hundred and thirty-five cases, twenty-eight, or fifteen per cent., died. Some of the deaths were due to complications, but the majority to the fever itself. Four autopsies were made, and all the organs examined except the brain and spinal cord. The pathological appearances were pretty nearly the same in all, varying only in degree. These lesions were—acute degeneration in the liver and kidney, with swelling and hyperplasia of the spleen. The other viscera presented no noteworthy changes.

In the liver there was a moderate degree of swelling and increased granulation of the liver cells. Careful search was made for such minute foci of cell-necrosis as have recently been described as present in several acute infectious diseases, but with negative result. In one case, which died while the temperature was very high, there

was noticed, in a degree which is very unusual, an accumulation of large, irregular, moderately granular cells, either free in the liver capillaries or clinging to their walls. These cells appeared to be swollen and detached endothelium.

The kidneys showed granular degeneration of the tubular epithelium, with considerable disintegration. The spleen presented the usual appearances of acute hyperplasia.

**General Summary.**—Morphological and biological examination of the blood and viscera of three patients, dead of typhus fever, gave a negative result.

Morphological and biological examination of finger-blood from six living patients showed in every case the presence of a bacillus in very small numbers. This bacillus is pathogenic for rabbits, guinea-pigs, and white mice, but though pathogenic in these animals the effect which it produces upon them is not one contributing material evidence in favor of its etiological relation-

ship to typhus fever. Indeed this is what might be expected, since, so far as we know, these animals are not subject to the disease. The fact of finding a new species of bacillus in the blood of six consecutive patients, with uncomplicated typhus fever, in the height of the disease, seems significant, and is suggestive of etiological relationship of the bacillus found to the disease.—*New York Med. Record*, June 25, 1892.

**Früh (C. D.) on Scarlet Fever Followed by Typhoid Fever.**—Lulu W., in the early part of 1889, was taken ill with scarlet fever, lasting nine days. There was no vomiting at the onset, no sore throat whatever, a temperature of 104° F. and 105° F. lasting the nine days, when a slight scaling was noticed from the left shoulder-blade.

On the tenth day, Robbie W., aged four years (brother), was taken with a typical case of scarlet fever. Recovery took place without any special features to note.

Lulu lingered very feeble, and did not seem to improve, when, in the third week, another chill took place; this ushered in an attack of typhoid fever. It ran a course of four weeks. Two years later, in 1891, the child was taken by an aunt to an adjoining state; scarlet fever had been in the house, three of her cousins having been ill. She was allowed to remain, and two weeks from her entry to the house she was again taken ill with this disease, this time with all the symptoms marked; desquamation was excessive; this was again followed by an attack of typhoid fever with exceedingly grave symptoms, hemorrhage lasting forty-eight hours, extreme conditions of collapse, and finally a greatly protracted recovery.

Robbie also had another attack of scarlet fever, marked in the symptoms, quite as distinct as the first attack; he also followed with typhoid fever, but being of a robust type, recovered from both conditions very promptly.

The mother, aged twenty-eight years, was ill with typhoid fever during February and March of 1892.

We have then scarlet fever and typhoid fever twice within two years, one disease following the other in the same individual, Lulu W.

One attack of scarlet fever followed in two years by another attack of scarlet fever, and then by typhoid fever, in Robbie W.—*New York Med. Record*, June 18, 1892.

**Fruit Eating.**—The value of fruit of various kinds in the dietary of the average healthy individual cannot well be overestimated. When it causes indigestion it is usually because it is taken at wrong times, and not because it is necessarily difficult of digestion. The proper time to partake of fruit, whether cooked or raw, is at meals, and not, as is so frequently done, at odd times throughout the day. At this season of the year most persons are the better for restricting the amount of nitrogenous food and indulging in raw fruit and green vegetables. It must not be lost sight of that fresh, uncooked fruit and vegetables ought to form a substantial part of our daily food. Cooking, though it may facilitate the digestion of fruit, does so at the expense of the peculiar quality of freshness the absence of which, in the long run, gives rise to serious disturbances of nutrition. A belief has gained ground of late years, based on a misconception of certain general statements, that fruit is harmful to persons with a tendency to gout. No doubt if cooked and sweetened by the addition of cane-sugar, dyspeptic disturbances are not unlikely to occur, but no possible drawback attaches to the use of raw fruit in proper quantities and provided that it is ripe. The salts contained in fruit are of the greatest value to the organism, and are not obtainable in anything like the amount required from any other source. Children particularly should be encouraged to partake of fruit as part and parcel of their meals, and if proper care be exercised in the selection of a ripe and undamaged article, and in the giving of it at suitable periods, no disturbance of the intestinal functions need be apprehended. In conclusion, it is a generally accepted maxim that fruit and alcohol do not go well together.—*Ed. Eng. Med. Press*, June 22, 1892.

**Latimer (T. S.) on a Study of Alcoholism.**—This is a report on 2,012 cases of alcoholism, of which 87 were maniacal. All were treated with potassium bromide; the maniacal cases with thirty grain doses every two hours, and the non-maniacal with the same dose at intervals of four hours. No addition was made to this treatment, except in three or four cases in which ten drops of tincture of digitalis and five grains of ammonium carbonate at intervals of three hours were also given. All recovered.

The study of the foregoing cases leads me to the following conclusions :

1. That the clinical phenomena attending excesses in the use of alcohol are the direct result of over-stimulation, and are not due to the abrupt withdrawal of the stimulus.

2. That though ability to swallow and retain stimulants is frequently wanting, the desire for them almost uniformly persists.

3. That alcohol in any form or quantity is unnecessary in the treatment of such cases, and is usually hurtful.

4. That the absolute and immediate withdrawal of alcohol is of the first importance in the treatment of all of the symptoms due to its excessive use, even in cases characterized by great feebleness and inability to partake of food.

5. That forced feeding is rarely necessary, and is of doubtful utility in most cases.

6. That for the protection of the patient no kind of bonds is called for, and, when necessary, for the protection of others, or for the contents of the room, they injuriously affect the mental state of the patient.

—*Phil. Med. News*, July 2, 1892.

**Perkins (A. T.) on Abdominal Cyst in a Fœtus.**—I was called to see a woman, and upon an examination found head in left oblique diameter, and labor progressing satisfactorily. In due time the head was born. Awaiting sufficient time, and uterine contractions being of sufficient force, traction was made without any results. The child being dead, I amputated she head, turned the child, and reversed the feet and legs up to the buttocks, when the same trouble was encountered. I introduced my hand within the uterine cavity, and cut through the abdominal wall of the fœtus with my finger nail, allowing a gallon or more of straw-colored fluid to escape, when delivery was speedily terminated. The woman made a satisfactory recovery.—*Texas Courier Record*, Feb., 1892.

**Eastman (J.) on a Case of Dermoid Cyst in a Male.**—On the 15th of September last, I was consulted in regard to Mr. W., age thirty-three, married, and the father of three children. The patient's appearance was one of extreme emaciation and weakness. He had the cachexia of cancer. He gave a history of severe lancinating pains in the right iliac region, where, on examination, I found a large

mass, apparently involving the cæcum. I pronounced the trouble either cancer of cæcum or of the meso-cæcum; and as the tumor was firmly fixed, I advised against operative interference.

Some two weeks later Mr. W. was passing bones per rectum, which, to all appearances, were those of a human skeleton, but very small. He had been passing some hard substances at stool for a week before he noticed what the hard substances were.

I opened the abdominal cavity, and found involving the cæcum a sac two thirds as large as a human head, originating, as I think, from the spermatic cord. On puncture of the sac, the walls of which were an inch thick, and seemingly malignant, a quantity of pus, together with a number of bones, poured out. There was an opening from the sac into the bowel.

The bones represented the various parts of a human skeleton—scapula, clavicle, numerous phalanges, etc. The ossa innominata were particularly well formed.

The edges of the sac were stitched to the abdominal wall; drainage was secured by means of antiseptic gauze packed in the sac, and the wound closed.

The man lived twelve days, dying of inanition.

No *post-mortem* was held.—*Va. Med. Month.*, March, 1892.

**Forbes (W. S.) on Papilliferous Fibro-Cystic Adenoma of Aberrant Breast Nodule.**—Mrs. S., forty-eight years old, when married, at the age of twenty-eight years, weighed 128 pounds. She now weighs 385 pounds. She has a younger sister who weighs 300 pounds, and who has borne two children, now young women, of twenty-two and twenty-four years of age. Mrs. S. has never been pregnant; she has always menstruated with regularity, without trouble, and continues to do so.

When examined December 18, 1891, a tumor was found in the left upper quadrant of the left breast. Both breasts were huge and pendulous.

The patient had observed a lump in the left breast for ten years, but only in the last twelve months had it begun to enlarge. The tumor appeared to be a fibroma lodged in a mass of fat, having no bands binding it either to the pectoral wall or to the mammary gland. After extirpation there appeared at least three inches of fat between the tumor and the mammary gland, and

about the same thickness of fat between the tumor and the middle of the lower border of the neighboring great pectoral muscle.

The tumor was removed without difficulty, and the microscopical examination was as follows :

The tumor is irregular in outline, the sides and borders covered by fat. Its weight is 109 grammes (nearly  $3\frac{1}{4}$  ounces), and it measures in its longest axis 8.5 cm. (3 inches), in width 6.5 cm. ( $2\frac{1}{4}$  inches), in thickness 4.5 cm. ( $1\frac{1}{4}$  inches). Upon section it cuts hard and creaks slightly under the knife. The cut surface shows several small cysts, varying in diameter from 0.5 mm. to 2 mm. Their outline is regular ; some are round, some ellipsoidal, and a few semilunar, with projecting masses extending into, and entirely filling, the cavity. Where any fluid is present it is clear and viscid, closely resembling egg-albumen. Sections made through different planes show these cysts to be restricted to an area slightly oblong, and about 3 cm. ( $1\frac{1}{4}$  inches) in diameter. This mass constitutes the tumor proper, with outlying bands of fibrous tissue.

Microscopic examination shows these cysts to be lined by cylindrical-celled epithelium, the masses projecting into the cysts being dendritic in character, with, in some, the appearance of branching. The stroma is a hard, dense, fibrous tissue, with here and there well-marked, but poorly developed, acinous-gland nodules, varying from one to three acini, their walls lined by flattened and poorly developed epithelium. The vascular supply to the growth has been abundant, and into some of the cysts hemorrhage has taken place.

The tumor is a papilliferous fibro-cystadenoma, a comparatively infrequent tumor of the breast.

From the position of the tumor and its histology I infer that it is from an aberrant breast nodule. These are not so rare as we are often led to believe, and when present are extremely liable to the development of neoplasms for the most part malignant in character. — *Philu. Med. News*, March 5, 1892.

**Fegen (C. M.) on a Case of Hydrencephalocele ; Removal ; Recovery.**—At the end of 1890 I delivered Mrs. — of a female child. Labor was very prolonged through the existence of a tumor projecting from the occiput of the foetus,

after birth the size of a medium-sized orange. This was diagnosed as a hydrencephalocele, pressure causing such diminution in its size that the portion of brain contained in it could be distinctly felt, though it could not be returned into the cranial cavity. The child was well developed at birth, but it began to waste at the end of about the eighth day. Ten days later—*i. e.*, when nearly three weeks old—the tumor became turgid and very black in color (at this time it was the size of a large orange, having steadily increased in size from about the end of the first week ; no doubt the rapid emaciation of the child was due to the enlargement of the tumor), causing the child great and continuous suffering. The child became very much worse, and appeared to be dying. The covering to the tumor had gangrenous sloughs all over it, and the integument peeled off on being touched. As a *dernier ressort* I decided to remove it. This I did by means of four double strong catgut ligatures passed through and through at the point of junction between the cranium and the tumor ; and tying very lightly and separately I then sliced off the tumor, and found it to consist of gangrenous integument, meningo-opalescent fluid (about one ounce and a half), and a piece of brain substance about the size of a walnut. The child remained in a critical condition for about ten days, the pedicle sloughing and discharging very putrid pus. At the fortnight's end the ligatures came away and the child made an uninterrupted recovery. Indeed, some improvement was noticed within a few hours of the operation.

I cannot account for the gangrenous condition except by attributing it to the increase in the size of the tumor. The child was very well attended to, as the parents are most intelligent people. The tumor was kept well wrapped in cotton wool. The child is now over twenty months old ; is fairly intelligent and bright ; small in size ; health is very fair. She cut two teeth at six months, but none since. Occiput shows three distinct ridges running to a central prominence, just posterior to the foramen magnum, the site of the protrusion. This seems to be filled up with some fibrous material. I am well aware that most teachers of surgery advise that these tumors should be left alone ; but when there is evident gangrenous sloughing and the child's life is endangered by it, I think it must be con-

sidered not only justifiable, but even necessary, to operate.—*London Lancet*, June 4, 1892.

**Gemmell (W.) on Menstruation during Measles in a Girl Aged Nine.**—Instances are not unknown in which the occurrence of an exanthem in adult females is coincident with an appearance of the menstrual discharge. But it must be rare to find in young children the same manifestation under the same circumstances; and therefore the following case seems worthy of record.

M. G., aged nine years, school girl, became sick and vomited on December 5, 1891, and during the next two days had sneezing, catarrh of the eyes, and nasal passages, headache, and some degree of pyrexia. The characteristic eruption of measles appeared on December 8th. She was admitted to hospital on evening of December 9th, when her temperature was found to be 103° F., the conjunctivæ much injected, the tongue dry and glazed, and the lips and cheeks swollen with numerous small white ulcers upon their surface. The measles rash extended over nearly all the body, and was very vivid. There was some slight cough, but the chest was clear both to percussion and auscultation, and there was no diarrhoea.

At the visit the next morning it was found that during the night there had been a discharge of blood from the vagina, amounting to about half a drachm, and examination of the fluid by the microscope showed it to consist chiefly of blood corpuscles, squamous epithelium, and *débris*. This discharge continued to take place each day regularly for five days, and it gradually ceased as the eruption faded. The rash was very pronounced in the acute stage, and the staining after its subsidence was well marked. I think it fair to assume that the hemorrhagic discharge from the vagina was a true menstrual discharge. It is true that I did not actually see it oozing from the lips of the os uteri externum, and that chiefly from want of a suitable speculum at the time; but examination by the finger showed no laceration nor abnormality of the vaginal walls, nor could any other reason for the discharge be detected. The girl herself was well nourished, and tall for her age, and had previous been in robust health; although her mother was dead her father and immediate relatives were all in excellent health. No history

that could be interpreted in favor of hæmophilia could be elicited.

The patient was dismissed well; and inquiries show that there has been no renewal of the discharge from the vagina since the subsidence of the measles rash.—*Brit. Med. Jour.*, March 5, 1892.

**Johnstone on Case of Primary Ventricular Hemorrhage.**—The patient was a man aged twenty-two. Previous health and family history good. On March 27, 1891, he had a slight accident to his head in the football field. His friends thought him irritable after this. He did his usual work until June 16th, when he felt giddy, and stumbled in going upstairs. After this he walked home about three hundred yards. About an hour after he vomited and fainted, remaining unconscious nearly an hour; again vomited. When seen three hours after the attack he was conscious, but complained of severe headache. After a restless, delirious night he had convulsions, became comatose, and died in eighteen hours. On *post-mortem* examination general congestion of vessels on the surface of the brain was found. Blood clots in all the ventricles; left lateral ventricle practically filled, that in the fourth most recently formed, and about the size of a filbert. On the under surface of the left frontal lobe there was a small patch of softened brain tissue, separated from the ventricle by healthy brain tissue. No clot found anywhere in the brain substance. Dr. Johnstone thought the fourth ventricle had filled with blood by gravitation, due to the dorsal position of patient. Cases of this kind were referred to by Gowers and Fagge; the most complete paper on the subject was by Sanders in the *American Journal of Medical Sciences* for 1881.—*British Med. Jour.*, June 4, 1892.

**O'Donovan (C.) on Meningitis in Children: Conclusions.** 1. Meningitis is a disease of frequent occurrence in children; its onset is often insidious. It is therefore to be guarded against, and carefully treated from its commencement.

2. It is most amenable to treatment in its incipency; after passing the first stage cases of simple meningitis recover infrequently, and then only after most careful nursing and treatment; tubercular meningitis, once well established, yields to no treatment, the reported cases of recovery being so infinitesimally few that they may be disregarded.

3. The best treatment up to date consists of absolute quiet, moderate blood-letting by leeches, free purgation, the constant application of the ice cap or other cold to the head, and the bromides and iodides internally with good, light nourishment.—*Maryland Med. Jour.*, June 25, 1892.

**Rouse (E. R.) on Phthisical Cavity Causing Abscess in the Breast.**—F.

R.—, aged forty-one, a male patient admitted into this asylum in 1886, suffering from mania with delusions, the latter being very persistent. He was a man of poor physique and with physical signs of advanced tuberculosis of both lungs, as indicated by cavities at both apices. In April last year our attention was called to a large abscess in the left breast, which was supposed then to have been caused by the patient himself, who was continually striking his chest owing to a delusion. The abscess was opened, and a thick curdy pus was let out. Patients, I may add, with delusions of a fixed kind, very often have organic disease, which no doubt accounts to a certain extent for the delusions from which they suffer. This pus continued to discharge until his death, and the sinus which remained never properly closed in spite of numerous attempts to make it do so; he recently died from exhaustion. On *post-mortem* examination, the sinus in the breast was found to communicate directly through the second intercostal space with a large cavity in the apex of the left lung, so that the pus evacuated from the abscess in the breast came directly from the lung; the latter was firmly adherent to the chest-wall in the entire upper lobe, and, in fact, could not be separated from it; the rest of the lung was filled with deposits of tubercle, as was also the right lung, and the intestines were studded with numerous ulcers also tuberculous in nature.—*London Lancet*, May 28, 1892.

**Chew (S. C.) on the Different Forms of Cardiac Pain.**—This kind of pain is found as a prominent symptom principally in three different forms of disease of the heart; and I desire to refer briefly to these from a clinical rather than from a pathologic point of view.

The first of these, and the one in which the pain exists in most intense degree, is angina pectoris, true angina with increased arterial tension, occurring in paroxysms, and most frequently associated with aortic or coronary disease or with fatty degenera-

tion of the heart. As the name of this affection implies, the pain is of the very essence of the disease itself. In severe cases it is nothing less than a mortal agony—an agony from the very intensity of the pain, and a mortal agony because, as testified by many sufferers, the pain is attended with a sense of impending dissolution.

A second form of cardiac pain closely allied in character to the one already considered, and yet distinct from it in its pathologic relations and generally less intense in type, is encountered as a complication of some cases of chronic nephritis, chiefly the contracted kidney or intestinal nephritis. In this class of cases the changes in the kidneys and sometimes in the heart are parts of a general arterio-sclerosis, and the pain in the heart is probably the expression of resistance to the blood-flow through the arterioles.

A third form of cardiac pain is found in dilatation of the heart, and is perhaps due to tension and stretching of the nerves in the heart-substance. Traube held that the pain of true angina is due to this cause. Whether it be so or not, the subjects of cardiac dilatation frequently experience pain about the heart, greater in degree in general in proportion to the rapidity with which the dilatation is induced.—*Phil. Med. News*, June 18, 1892.

**Biggs (G. P.) on Rupture of the Cystic Duct.**—At a recent meeting of the N. Y. Pathological Society, B. presented specimens showing the rupture of the cystic duct. The patient, a colored woman, fifty-nine years old, had had, one month previous to her last illness, an attack of cramp-like pains in the upper part of the abdomen, and these were similar to those which ushered in the present illness. Four days previous to her admission to the New York Hospital she was suddenly seized while at work with cramps in the upper part of the abdomen, and on the following day this pain was succeeded by a soreness which steadily increased in severity. On the first day there was a chill, followed by fever, and this was repeated on the third day. The prominent symptoms were vomiting, constipation, abdominal distension, dyspnea, and prostration. At the time of her admission the conjunctiva was markedly jaundiced, the chest was full of moist râles, and the heart action was so rapid and feeble that the heart sounds could not be heard. The abdomen was distended and

tender. Pulse, 96 ; respirations, 30 ; temperature, 101.4° F. On the evening of the same day, her temperature rose to 104.4° F., the respirations reached 52, and the pulse 132. She died the same night, the temperature just before death being 107.2° F.

At the autopsy, which was made fourteen hours after death, the abdomen was found to be greatly distended and the peritoneal cavity was filled with a dark brown, bile-stained fluid, having a slightly faecal odor. The intestines were matted together by abundant recent fibrinous exudation, and the liver and spleen were united by recent adhesions. The vermiform appendix and caecum were normal. The pleural cavities each contained three ounces of thin serous fluid, and the lungs were congested and oedematous. The heart-muscle, though soft and flabby, presented no apparent structural change. The orifice of the common bile-duct was about the size of a goose-quill, and just inside of the opening a large gall-stone was impacted. It was ovoid in shape and about one and a half centimetre in diameter. When pressure was made on the collapsed gall-bladder, a few drops of bile and a small quantity of gas escaped into the peritoneal cavity from the cystic duct, just at its origin at the gall-bladder. An oblique perforation was found at this point, which readily admitted a small probe. Upon opening the gall-bladder and gall-ducts the point of perforation was found to be in the base of an old ulcer, about three quarters of a centimetre in diameter, situated in the cystic duct just below the neck of the gall-bladder. The edges of the ulcer were hard and smooth, and its base necrotic. Careful search at the point of perforation in the gall-bladder, the gall-ducts, and in the peritoneal cavity failed to show the presence of any other gall-stone. The cystic, hepatic, and common ducts were all much dilated, the latter admitting a cylinder one centimetre in diameter. The gall-bladder, which was collapsed, measured five centimetres in diameter. Its muscular walls were considerably hypertrophied and its mucous membrane thickened from chronic inflammation. At its neck was a superficial ulceration. The liver was of a greenish-yellow, the left lobe being much atrophied. The bile ducts were distended with greenish bile, and the liver-cells showed considerable fatty change. The

ulcer through which the perforation had occurred was apparently an old one, and must have been produced by the stone found at the opening of the common duct. The hypertrophy of the walls of the gall-bladder prevented its dilatation and caused great distention of the gall-ducts.—*N. Y. Med. Record*, Feb. 27, 1892.

**McMurtry (L. S.) on Appendicitis ; Its Diagnosis, Pathology, and Treatment.**—I would submit the following conclusions :

1. Inflammation about the caput coli is, as a rule, appendicitis.

2. A certain proportion of cases will recover spontaneously by resolution. With these, recurrence of the disease is common.

3. In the larger proportion of cases the disease endangers life, and it may at any moment assume a practically hopeless condition.

4. Operation involves less danger than delay, and should be resorted to in all cases in which a high grade of inflammation is persistent.

5. Sudden, severe pain in the right iliac fossa, coming on toward the close of the second day of the attack, followed rapidly by rise of temperature, associated with a sensitive tumor of recent formation, are positive signs of perforation and suppuration. There are no special signs of perforation if it takes place late in the attack after adhesions have formed ; if adhesions have not occurred or are imperfect, shock will follow perforation and be accompanied by chill, vomiting, and collapse.

6. By early operation is meant operation before the pathological process has reached an advanced stage. It cannot be measured by days and hours, but by the symptoms. It is before pus has been diffused over the peritoneum and before general septic peritonitis has been inaugurated. If shock be present there may be need to stimulate and assist reaction before operating.

An early operation should aim to remove a diseased and inflamed appendix, thereby radically curing an active disease which is well defined and which endangers the patient's life.

7. The essentials of the operative technique are brief anæsthesia, quick and thorough work, removal of the appendix, irrigation, and drainage. The lateral incision is preferable to the median.—*New Albany Med. Herald*, May, 1892.



**Crofford (T. J.) on Tubercular Peritonitis.**—Two cases are reported, in both of which surgical intervention was successful. The writer's views may be expressed as follows :

1. Tubercular peritonitis is an operable condition.
2. An early operation is of greatest value.

3. The chronic variety offers the best indications for surgical interference.

4. When the primary deposit is in the tubes (which Winckel declares to be in fifty per cent. of the cases), an early salpingotomy will cure the disease.

5. Operations later in the disease will frequently prolong life, and possibly cure.  
—*Texas Med. Jour.*, June, 1892.

MISCELLANY.

**Schmidt on Microcidine.**—Before the Société de Médecine de Nancy, S. recently stated that this substance in solution had an antiseptic power ten times greater than that of carbolic acid, and with a toxicity much less than that of corrosive sublimate, B. naphthol, and carbolic ; greater, however, than that of cresylol and lysol.

Microcidine appears to possess all the properties of an ideal antiseptic, but there is one grave objection, it has not, from a chemical point of view, a fixed or constant composition.—*Gaz. des Hôp. de Toulouse*, April 23, 1892.

**Johnson (R. W.) on Surgical Antisepsis.**—J. boils everything except himself, his patient, and the rubber tissue. He boils ligatures, instruments, needles, gauze, etc., and also the trays which hold them. The boiler is a plain tin one, large enough to accommodate the tray, with spigot attached near the bottom. A nest of elongated trays of granite-ware is found most convenient. Before leaving his office, he goes over the instruments that will be required and puts them in a tray. The dressings to be used are put in another tray, and so on ; and finally the trays are built up, one upon another, and all are put into the boiler, which is put in the back of the wagon. At the patient's house the boiler is filled up with boiling water, put upon the stove, and boiled for twenty or thirty minutes, while the patient is being prepared for the operation. When ready for operation, the trays are lifted out by means of sterilized button-hooks. The boiler is put in an elevated position, a rubber tube attached to the spigot, and the boiled water used for irrigation. It makes no difference whether knives or dressings touch the sides of the tray, for they are quite aseptic. A small amount of bicarbonate of soda added to the water prevents the instruments from rusting.—*Am. Lancet*, April, 1892.

**Lichtwitz (L.) on Extirpation by the Natural Passages of a Multiple Papilloma of the Larynx in a Child by the Aid of a New Method: Intubation with a Fenestrated Tube.**—Briefly the tube was provided with a fenestra at the proper level to permit protrusion of the neoplasm into the lumen of the tube. Thus free access was given to the growth, and manipulations were conducted with absolute safety. The author predicts a wide field for this method in children, especially in benign growths and in the case of those seated in the subglottic region, which have hitherto been inaccessible by endolaryngeal methods. It will also prove useful in adults with benign growths occupying the upper part of the trachea.—*Ann. des Mal. de l'Oreille, etc.*, May, 1892.

**Tuttle (J. P.) on Recovery after Taking a Large Quantity of Veratrum Viride.**—Mr. A. was attacked on February 5th with severe epididymitis and orchitis. That night his brother came to me, saying that his fever was very high and that he was suffering a great deal of pain. I prescribed for him "Tr. verat. virid. (Norwood's), f 3 iv. Sig.: Two drops every half-hour until perspiration is well established." The patient read the directions "two teaspoonfuls" every half-hour, and took the first dose accordingly at 8.30 P.M. This he retained without any appreciable effect until 9.05 P.M., when he took the second dose of two teaspoonfuls. In about half an hour he "began to vomit and became very weak," as he described himself. On the following morning I was called to see him, and having heard his story of how he took the medicine, was more surprised to find him alive than that he was exceedingly weak and very pale. The heart was feeble but regular, and the respiration very nearly normal. A small quantity of whiskey and infusion of digitalis were given, and

the patient recovered without any unusual symptoms. The prescription was compounded by a reputable pharmacist, who assured me that he had dispensed the stronger tincture. The interest of the case centres in the remarkable fact of the patient having retained so large a quantity of the drug for nearly an hour without any disastrous effects.—*New York Med. Four.*, June 18, 1892.

**Shively (H. L.) on the Etiology and Treatment of Spasmodic Torticollis.**—A case is reported in which severe tonic and clonic convulsive seizures affecting the sterno-mastoid and trapezius muscles occurred, following prolonged sexual excesses and onanism. After a long course of futile medical treatment, the patient, a young man, was operated on, an inch of the right spinal accessory nerve being removed through incision on anterior border of sterno-mastoid. There was immediate relief of spasm following operation, but the torticollis deviation of head to left persisted, owing to firm contraction of the splenius capitis and the deep rotators. This, however, gradually disappeared, and a complete cure was reported six months after resection of the nerve.—*International Journal of Surgery*, May, 1892.

**Wells (Howard) on the Use of Cocaine in Genital Irritation in Men.**—Using cocaine for treatment of nasal catarrh, he noticed its soothing power on sexual irritability in men, and thus its use in such cases has been suggested to him. He cites some six cases where it has been used either as a four per cent. injection into the deep part of the urethra, or being inhaled into the lungs in solution of one grain. In all cases the results are very good. The cases cited present intense and repeated sexual excitement, with erections at night which disturb the rest of the patient; such being the case until an emission takes place, or, as was the case with one patient who used masturbation as an artificial relief. Where cocaine has been used as above mentioned the symptoms disappeared and the emissions have either ceased or have been rare. The author suggests the use of the remedy in chordee, though he cannot state his experience with such cases. The objection to the remedy which the author mentions, is that there is an apparent tendency to insomnia and an occasional irregularity of the heart's action. Opium combined with cocaine has rather

produced harm, as it impaired the action of the cocaine and has not produced sleep. An examination of the genitals after the use of cocaine in pharyngeal catarrh has shown the penis to be much retracted, a decided reduction of the sensitiveness of the glans penis, and the scrotum drawn up.—*The Therapeutic Gazette*, June 15, 1892.

**Ointment for Pruritus Ani.**—

B	Hydrargyri bichloride.....	gr. jss.
	Ammonii muriat.....	gr. ij.
	Acidi carbolici.....	3 j.
	Glycerini.....	3 j.
	Aquæ rosæ.....	3vj.

M. Sig. Apply locally, morning and evening.

—*St. Louis Med. and Surg. Four.*

**Petit on the Microbe of Cancer.**—

The author reviews briefly the two opposing theories, viz., that of an outside germ and that of an infecting cancer cell. He shows that no definite micro-organism from without has met the tests of pathogenesis as laid down by common consent of all bacteriologists.

Relative to the view of a peculiar cancer cell, he calls special attention to recent work by Soudakewitch (*Annales de l'Institut Pasteur*, March, 1892) on the intracellular parasitism of cancerous neoplasms. In ninety-five cases of cancer the latter has always found constant intracellular parasites of the class of sporozores. These are of various forms. Some are small, round bodies, clearly defined, and lie in the protoplasm of the cancerous cells. They are not cell invaginations or degenerations. They are analogous to certain parasites found in the rabbit. The truth of this hypothesis has yet to be determined.—*L'Union Médicale*, May 7, 1892.

**The Vapor of Naphthalin in the Treatment of Whooping-Cough.**—

As a result of a considerable successful experience, Chavernac (*Bulletin Gén. de Thérap.*, 40. liv., 1891, p. 337) recommends fumigation by means of naphthalin in the treatment of whooping-cough. About half an ounce of the drug is, on one or more nights, made to burn in a suitable vessel in the sick-room, the windows and doors being tightly closed. The cough at once moderates, the dyspnœa and other symptoms are favorably influenced, and the attack is soon brought to an end. Complications may contra-indicate the employment of the treatment. Thus, individuals suffering with pulmonary tuberculosis cannot bear the treatment.

**Harvey (A.) on A Case of Diabetes Insipidus Permanently Cured by an Inter-Current Attack of Measles.—**

H. F., aged three years and two months, the youngest of ten children of strumous diathesis but of healthy parents, fell down stairs on April 15, 1890. The fall was followed by vomiting, which soon passed off, and by fright which was more lasting. It was soon noticed that the urine was increased in quantity, and that there was an increase in frequency of micturition.

When I first saw H. F., on April 19th, she was well nourished, the weight being 30 pounds; very timid, especially at the sight of the stairs; there was loss of appetite and constipation, but no marked thirst; the urine was colorless, of sp. gr. 1.002, and free from sugar or albumen. On measurement, the quantity passed in twenty-four hours was found to be fourteen pints. Various remedial measures, especially ergot, were tried with partial success, but the polyuria continued, the daily average being 170 oz.

In November of the same year measles broke out in the house, and on December 3d H. F. showed symptoms of the disease. On that day the urine diminished to 47 oz. and the two following days it further diminished to 15 and 11 oz. The rash appeared on December 6th, when 8 oz., of urine were passed with sp. gr. 1.026 and containing a quarter of a column of albumen. The urine continued to diminish till December 10th, when only 1½ oz., were excreted; but the next day the amount was 15 oz., and it was free from albumen; and from that time it has been normal in quantity and quality. The body-weight rapidly increased (31½ pounds on February 26th), and up to the present (January, 1892) H. F. has enjoyed uniformly good health; but it is only recently that she has ventured to face the stairs unaccompanied.—*Birmingham Med. Journ.*, March, 1892.

**Newton (R. S.) on the Disappearance of Sugar in the Urine of Diabetics just before Death.**—Having recently occasion to review the works of Ebstein and Cantani, I noticed that in neither was any explanation offered of this well-known clinical fact. While I was an interne in the London Hospital, Dr. Stephen Mackenzie was making special observations upon diabetes in the wards of Dr. J. Hughlings-Jackson, having twelve cases under treatment. In some part of the

study of the case a "fasting trial" was imposed of twenty-four hours to note the effect upon the production and increase and decrease of the sugar. At 10 P.M. the last meal was given. With the exception of plain boiled water, nothing whatsoever was allowed for twenty-four hours. These "fastings" having been conducted in over a hundred cases, the results were always uniform. The urine during the trial was tested every hour, the patient being called upon to pass his urine "on time." Singular to say, in all my experience I never failed to obtain "*some*" when the time came around. For the first few testings the percentage of sugar appears as usual, after six hours for two, three, even four trials it is augmented, then begins to decrease. With the decrease there is a fall in the specific gravity; and when this fall occurs it is always followed by the appearance of albumen at the next trial, and from this on the albumen remains. At some point after the tenth hour of fasting the sugar disappears, and very often with the disappearance of the sugar blood appears, and often I have been obliged to break the trial on this account. These trials have been so frequent that some positive relation exists between the disappearance of the sugar and the want of food. As most diabetics die a lingering death, from coma, acetonæmia, etc., they seldom receive any food or nourishment for hours before death.

Recalling the result of my observations, it would seem (aside from other theories) that the result at the end of several hours' fasting was akin to the state of the dying diabetic, and if in the living sugar can be made to disappear, why not in the dying?—*N. Y. Med. Jour.*, April 30, 1892.

**Stone (A. K.) on a Case of Glycosuria Caused by a Lesion Probably Situated near the Fourth Ventricle.**

—A girl, thirteen years old, of good family and personal history, had an alveolar abscess and later an otitis media. This was followed by attacks of headache mostly located upon the left side. There was increase in thirst and in the amount of urine passed. During the headaches there was diplopia. When first seen she had lost about seventeen pounds of flesh, was weak, with persistent headache over the left eye, bowels constipated, skin harsh and dry. Paresis of the sixth nerve on the left side. Absence of all tendon reflexes. Urine: five pints,

pale, and specific gravity, 1.050; no albumen; sugar, nine per cent. by the polariscope. On limited diet she improved for a time, then the headaches became more severe and a general neutrititis appeared. The muscles of the neck were tense. There was a return and exaggeration of all the reflexes and ankle clonus was present. During the starvation diet of the semi-conscious period, the sugar in the urine gradually fell until just before her death the analysis showed specific gravity 1.030; albumen a trace; sugar absent. Two days before death there was paralysis of the right side, with marked signs of irritation on the left side, followed the next day with paralysis of the left side.

As there was no autopsy the case was simply interesting from its probabilities. The persistent headache, the diplopia and hemiplegia followed by paraplegia, would point to the head as the seat of the trouble, while the glycosuria, the left diplopia, and crossed right paralysis would point to the vicinity of the pons, and the unexplained purulent otitis media would suggest that the lesion was tuberculous in origin.

Diabetes in children I found was confined to reports of one hundred and seventeen cases, while there are only eleven cases where glycosuria was proved by the autopsy to have been caused by tumor near the fourth ventricle.—*Boston Med. and Surg. Jour.*, April 21, 1892.

**White (W. Hale) on a Condition of the Urine Met with in Phthisis.**—

Out of nine specimens examined two showed nothing abnormal, but in the remaining seven the urine often remained acid a very long time, in some instances as long as four months, and many specimens gradually became of such a dark blackish-brown color that, when seen in quantity, the fluid appears quite black. All the urines were left at the temperature of the ward, and freely exposed to the air to begin with, but if they were being kept for a long time, they were ultimately transferred to stoppered bottles in order to prevent evaporation, but the bottle was always so large that the urine never occupied more than a third of it. Nine specimens of urine from one case were put into an incubator at a temperature of 35° C.; two went acid in a day, four in three days, one in eight days, and two in ten days. Those which kept acid over a week became very

dark. We thus learn that the acidity may persist some time in spite of a high temperature.

The sediment which formed in the acid urines consisted of amorphous urates with abundance of uric-acid crystals. If the urine had remained acid some time abundance of yeast-like micro-organisms could be found in it, but very few bacilli. On the other hand, urine which had undergone ordinary alkaline decomposition showed very few yeast-like organisms, but plenty of bacilli. It is thus seen that, in many respects, the changes undergone by these urines are the same as those commonly described under the name of acid fermentation. Most of the urines which remained acid some time developed a very peculiar smell; it was not absolutely repulsive and disagreeable, but resembled the smell of certain rotten cheese. Many of the urines which remained acid for some time gradually became darker and darker, until at last they were, when seen in bulk, quite black, but a dark brown in thin layers. This change usually took a month or more. Not all the urines which remained acid got darker, and many which became somewhat darker did not reach the black stage. If a urine, which was darkening, turned alkaline, it often continued to darken after the change in reaction. When once the urine had become black, it remained so, even if kept for nearly a year. The cause of this darkening is obscure. It is not due to pyrocatechin or any of the allied substances, for they only cause a darkening of the urine when it is alkaline, and they reduce Fehling's solution, but the dark acid urine of these patients with phthisis did not do so.

These peculiarities of the urine could not be connected with any particular symptoms observed during life, nor with any conditions found after death. None of the patients who died had any local disease of the genito-urinary apparatus. They were all ordinary cases of phthisis. In those that did not die the diagnosis was confirmed by finding tubercle bacilli in the sputum. The condition of the urine was not related to any particular drug or diet. It seems most probable that these peculiarities of the urine are due to the excretion in that fluid of some of the direct or indirect products of the action of the tubercle bacilli.—*British Med. Jour.*, May 21, 1892.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## LEADING ARTICLE.

### SOME NEW FACTS RELATIVE TO THE ETIOLOGY OF DYSENTERY.

By common consent the term dysentery has been applied to those cases characterized by the passage of mucous and blood from the bowels. The disease has been regarded by some as merely a local catarrhal or croupous inflammation of varying lengths of the lower bowel. By others it has been looked upon as a general disease with a characteristic local lesion. The acceptance of this latter view implies the existence of a special cause, producing special lesions and symptoms. We have long known that the disease resembled other so-called infectious maladies in that it was caused by poor hygienic surroundings, overcrowding, bad sewerage, etc., but no one could find out the special morbid agent.

Recent observations made by different observers seem to have solved the problem in one direction at least. From the various inflammations of the large bowel which collectively are called dysentery we can separate one form both as to pathology and symptoms which is produced by a special amœba.

Interesting papers on this topic were recently read by Dr. W. T. Councilman,<sup>1</sup> before the Association of American Physicians and by Dr. E. P. Gerry, before the American Medical Association. The former paper is a discussion of the disease along general lines with a careful analysis of thirty-four cases. Of this number eight were of the variety known at the present time as "Amœbic" dysentery. In this variety the leading pathological changes are as follows:

<sup>1</sup> Councilman, *Bost. Med. and Surg. Jour.*, July 7, 1892.

The intestinal coats are all thickened, especially the sub-mucous. There is not only a general thickening, due to an œdematous condition, but there are sharply circumscribed projecting nodules in which are small cavities filled with viscid gelatinous pus. There is usually a small opening on the surface leading into these cavities. Frequently these small cavities communicated with one another by means of sinuous tracts which are filled with the same material. The elevated nodules vary in size, and are seated in the submucosa. The openings into them are frequently no larger than the head of a pin or so large that the whole cavity is freely exposed. Even in these cases the surrounding mucous membrane is deeply undermined, and there are often found masses in the submucosa, leading to similar ulcers. These undermined ulcers in connection with the formation of cavities and sinuous tracts in the submucosa may be regarded as the form of ulceration most frequently met with. Ulcers of this character are found in the same intestine with other forms of ulcers. They are most numerous in the last portion of the transverse and descending colon. There are other ulcers with somewhat undermined edges, which represent simply excavations in the thickened submucosa without distinct cavity formation in the tissue, and ulcers which represented a later stage of the excavated ulcer. In these the undermined edges have sloughed away, leaving the edges in places smooth, in others only slightly undermined. These had a firm base, which generally extended to the muscular coat.

This submucous coat is always the one most affected. This is infiltrated and œdematous, not only in the neighborhood of the ulcers but in places which are free from ulceration. The ulcers increase in extent by the gradual infiltration and softening of this tissue, with subsequent necrosis of the overlying tissue. The roof which covers in the more or less closed ulcers is broken through, the infiltration and softening continue at the sides, and an ulcer with deeply undermined, ragged edges is formed. The base of these ulcers is clean and is formed by the muscular coat. Although the ulcer advances in the submucosa by the gradual softening and disintegration of the tissue, the muscular coat offers a barrier to this destruction. The upper layers of it become necrotic, and the cellular infiltration extends through it into the inter-muscular connective-tissue septa and the subserous coat.

Then the same process which took place in the mucous membrane is repeated here. The circular muscular coat is dissected up, the vessels supplying it are destroyed, and it undergoes necrosis. The large sloughs of tissue which are cast off and frequently passed in the stools are composed either of this coat or of the muscularis mucosa. While these processes are taking place, the peritoneal coat becomes enormously thickened, and the same process of destruction is continued in this. There are adhesions formed with the surrounding viscera, and the greatly swollen intestine becomes convoluted and adherent to itself and to the surrounding viscera.

The changes in the mucous membrane are for the most part secondary to those in the submucous coat. The ulcers are formed by a continuous advance of infiltration and softening in the submucous and inter-muscular tissue, with necrosis of the overlying tissue. It is possible to divide the ulcers into four forms: (1) Ulcers characterized by cellular infiltration, softening and cavity formation in the submucosa; these have a small opening in the mucous membrane and often communicate with neighboring ulcers by passages in the submucosa. (2) Ulcers with slight undermining of the edges, representing simple excavations in the thickened submucous tissue. (3) Ulcers with smooth sides and clean bases. (4) Ulcers with extensive adhering sloughs. Although these various forms at first sight seem rather different,

the differences merely represent different results of the same process. They are due to the nature of the tissues, to its arrangement in layers separated by loose connective-tissue, the rapidity of the extension of the process, and probably in part to the combined action of other bacteria with the amœbæ.

The mucous membrane at a distance from the ulcers undergoes very little change. The epithelial layer generally disappears and the upper part of the glands may be eroded. Lower down some of the glands may be dilated and full of mucous and pus cells. Confluence of neighboring glands may produce cysts. The glandular epithelium may markedly proliferate at the ulcerated edges.

Lambi (1849) Losch, Kartulis, and Osler have all described the special organism which is believed to be the cause of all these changes. The examination of the stools if careful and persistent will reveal an amœba which is especially abundant in the gelatinous masses found in the bowel contents. If they are moving actively their recognition is easy. The movement is one of progression or at other times by the exhibition of pseudopods. The amœbæ are from 15 to 25 *mm.* in diameter, and there can be distinguished in them a slightly granular refraction, interior filled with large vacuoles and a smooth homogeneous exterior. The presence of a nucleus has been asserted by some writers and denied by others.

The lesions which are produced by the amœbæ in the different organs are all the same in kind. They are different from those produced by any bacteria that we know of, and the mode of their production is different. The amœbæ seem to produce both a necrosis of the tissue and a liquefaction of the inter-cellular substance of the connective-tissue, as well as of the cells. This action of the amœbæ is seen more clearly in the production of the abscesses in the liver and lungs, where the process is uncomplicated by the action of bacteria, than in the intestine. There is never the remarkable destruction of cells with the breaking up of nuclei and the formation of nuclear detritus which is observed in the action of certain bacteria. Nuclear detritus is usually present in a certain degree especially in the abscesses of the lung, but not necessarily so. The necrotic cells seems to undergo a slow destruction and lique-

faction, the nucleus sharing the same fate as the cell protoplasm. In all cases the number of amœbæ found in the lesions, bears a distinct relation to the activity of the process. Aside from this direct action of the amœbæ on the tissue, we must recognize as probably of equal importance with this, the action of the soluble products which they produce, as shown in the diffuse necrosis of the liver cell.

Dr. Gerry's paper<sup>1</sup> is the report of a single case of amœbic dysentery occurring in a single woman aged twenty-five in whom the diagnosis was made ante-mortem based upon the finding of amœbæ in the stools and the typical appearance of the gut examined *post-mortem*. No amœbæ were found in the secretions from the ulcerated bowels.

The amœbæ are probably taken with food and drink. They exert no influence on the stomach and small gut but they find

in the large bowel an alkaline material affording suitable conditions for their growth. The clinical histories of these cases is characterized by a variable perhaps, uncertain opening, marked intermissions and exacerbations of bloody stools, having in them what one learns to recognize as necrotic tissue of a grayish-brown color. Tenesmus is not usually a prominent symptom. Anæmia is usually well marked.

Diagnosis having been established, the organisms must be destroyed. An important clinical fact is the undoubted curative value of simple cold water injections containing either quinine or boric acid. Eichberg, of Cincinnati, suggests that as warmth favors the multiplication of organisms of a low order, cold either destroys their vitality entirely, or suspends it sufficiently to enable the bowels to throw off the organisms.

## REPORT OF GYNÆCOLOGY AND OBSTETRICS.

BY ELIZABETH ADAMS, M.D.

**Maddox (J. C.) on Syncope in Placenta Prævia.**—To secure complete dilatation of the os uteri should be the first thought. The writer advises the air ball, introduced in a collapsed condition; this may be inflated to the size of a child's head. Contact with the os facilitates dilatation, it also acts as a vaginal tampon. Should the cervix be stubborn, the hemorrhage not controlled and syncope have not supervened, vivisection is advised to promote dilation and turn the current of blood in another direction. To arrest post partum hemorrhage, accept nature's suggestion, place patient in a sitting posture and invite syncope as early as possible or an approach to it, until results may be secured by other remedial measures.—*Mass. Med. Jour.*, May, 1892.

**Watson (J. A.) on Treatment of Abortion.**—In an interesting paper on the above subject, the author cites the following:

Mrs. X., finding herself pregnant, resolved at the end of the second month that she did not wish to bear a child, and decided to induce an abortion. She procured an ordinary gum catheter, and on retiring to bed passed it up into the uterus,

and, withdrawing the stylette, allowed it to remain several hours; this she repeated the following night, when pain and hemorrhage convinced her that her labor was not unrewarded. The flow continued several days and then became offensive. The pains had given place to a general soreness through the pelvis; rigors and fevers soon followed. At this stage I was called in.

I found the patient slightly delirious, though she would answer questions correctly; temperature 105°, with frequent fluctuations; pulse 120; the surface of the body was quite moist. I found the cervix inflamed and rigid; oozing from the os was an offensive discharge. I decided that the uterus contained a septic fœtus, which was rapidly poisoning the mother, and that prompt delivery was imperative. Ordinarily I should not have hesitated to dilate the cervix and turn out the contents of the uterus with a curette, but the marked metritis and peri-metritis already present gave doubtful promise of success along that line, so I resolved to try the effect of prolonged hot douching.

I directed the nurse to project a continuous stream of water, temperature 120°, against the cervix for three hours. The patient was placed over a large tin douche-

<sup>1</sup> Gerry, *Four. Am. Med. Assoc.*, July 23, 1892.

pan so arranged that the water would run out through a rubber tube into a receptacle at the side of the bed. The water was turned on and kept up as continuous lyas possible for four hours; the temperature was now 99°; pulse 100; mind clear; complains of intermittent pains through the uterus; cervix is beginning to dilate. Administered a little stimulant and directed douche continued, which was done at intervals for two hours longer, when there was expelled from the uterus a partially decomposed foetus with punctured membranes.

The rationale of this treatment is plain and needs no explanation.—*N. Ca. Med. Four.*, May, 1892.

**Smith (W. A. DeWolf) on Eclampsia.**—Of the fifty-six cases reviewed, 28 per cent. of the mothers died. As to treatment. I deem that the indications are satisfactorily met by the course of treatment recommended by the majority of English and American authorities, *viz.*, the administration of chloroform and rapid delivery. For cases in which convulsions occur before delivery, this treatment is usually satisfactory, and in the majority of cases in which convulsions occur after delivery they are mild in character and can be controlled by chloral and bromide administered by the mouth or by enæma. Even in cases reported by writers who recommend bleeding, chloral and bromide, or morphine, it is almost invariably recorded that chloroform was given and the uterus emptied as soon as possible. In some cases of convulsions after delivery it has been necessary to resort to chloroform to control the spasms.—*Med. News*, May 7, 1892.

**Brown (E. T.) on a New Baby Incubator.**—The complete incubator consists of a packing-box 33 inches long, 21 inches high, and 12 inches wide, inside measure; a false bottom upon which a mattress is placed, and under which the fresh air is admitted, through an opening 4×10 inches; a false top with opening over the child's head for the escape of warm air; a three-gallon pail of water and hot air and smoke flues. The bottom of the box has a hole cut in it to admit the pail, which rests upon a piece of sheet-iron under which a lamp or gas-jet is placed. The sheet-iron one foot square is nailed to the box. The heat from the lamp is concentrated under the pail by a six-inch section of stove-pipe and the fumes conducted by a two-inch smoke-flue up through the four-

inch warm air-escape, thus producing a constant and sufficient current of air through the incubator. The front of the box opens on hinges at the bottom and has a large glass window which affords a view of the child and the thermometer which hangs on the back wall. Filling the pail with water at about 120° F., an ordinary bracket-lamp, with very slight attention, will maintain a uniform temperature 15° to 25° F. higher than that of the room. By covering the box with building paper and throwing a folded quilt over it, the temperature may be maintained with less heat from the lamp and consequently with a lower temperature of the pail of water. The pail may be fitted with a tight cover or with openings for evaporation if more moisture be desired in the air. The sheet iron need never be heated to such a point as to be objectionable.—*Med. Record*, April 16, 1892.

**Barker (T. R.) Does Organic Disease of the Heart Preclude the use of Chloroform in Parturition?** Chloroform by inhalation can and will if properly administered save the lives of parturient females suffering from organic disease, when death seems imminent from over-stimulation of its ganglia through reflex nervous action. Organic heart disease then does not preclude the use of chloroform in labor, but rather is a condition calling for its careful administration.—*Buffalo Med. and Surg. Jour.*, June, 1892.

**Mass (W. H.) on Puerperal Fever.**—There are three principal points of infection in the recently emptied uterus. 1. Decomposing blood-clots at the placental site caused by the entrance of air into an imperfectly contracted and retracted uterus. 2. Retained fragments of the Secundines due in the majority of cases to too great waste in delivering the placenta. The Credé pressure is sufficient activity until the placenta presents when it should be turned upon itself in a spiral manner. By this process the after-coming membranes are twisted and cohere like a cord. 3. Laceration of the cervix. In this condition the poison is received by the lymphatic venous sinuses. The higher up in the canal the lesion occurs the more virulent the injection. As the lymphatics of the cervix are not so numerous as in the corpus uteri, the danger of infection at this point is not so great. The process often limited to a metritis. But from a mass of foul clots in the uterine cavity we



may look for septicæmia,—rapid and overwhelming. *Treatment.* Bold measures are demanded. Empty the womb of its accumulated filth. Put the patient on the table and scrape out the cavity with the dull curette. If done in time, improvement will invariably follow soon after, and the temperature fall several degrees. In this condition the womb can be scraped with impunity. That old dread of meddling with the puerperal uterus, though all the scenes in the drama of blood-poisoning were being enacted before his eyes, no longer withholds the hands of the obstetrician.

Submit the uterus then to the same surgical treatment that you would any septic cavity. Curette fearlessly the interior until certain that nothing detachable can possibly be left behind. If moderate hemorrhage follow, so much the better. Then flush the cavity with a stream of hot water through a bulb syringe and inject four ounces of peroxide of hydrogen before withdrawing the tube. Repeat this flushing process twice daily. The reflex uterine irrigator of Dr. Howard Kelly is an excellent instrument for the purpose.

The medical treatment consists of strychnine, a thirtieth of a grain twice a day, and alcohols; avoiding opium as far as possible. The best antipyretic is a five-grain powder of acetanilid.

I will in conclusion briefly recount the features of a case occurring in my practice within the past month. A young primipara was seized with puerperal fever on the second day, the temperature rapidly rising, till the tenth day it oscillated between  $104^{\circ}$  and  $105^{\circ}$ . They then discharged the attending physician, a very competent man and called me in. I found her in a muttering delirium, drowsy and sallow, with a pulse of  $140^{\circ}$  and temperature  $104.4^{\circ}$ . There was some swelling and tenderness over the abdomen. Visiting her later that day the thermometer marked  $105^{\circ}$ . I procured an assistant at once to administer chloroform and placing her in Sims' position, scraped from the uterus two tablespoonfuls of foul clots and shreddy material. Both cervix and perineum were badly lacerated, and the whole generative tract covered with patches of white deposit. Taking a bulb syringe, I passed four inches of the tube into the uterus and injected half a gallon of hot water, following it with four ounces of peroxide of hydrogen. In twelve hours the temperature fell from  $105^{\circ}$

to  $101\frac{1}{2}^{\circ}$ . This intra-uterine treatment was repeated twice a day. On the next day there was some febrile reaction, but two days after the temperature marked her convalescence went on uninterruptedly thereafter. — *Pacific Med. Jour.*, April, 1892.

**Harris (C. H.) on a New Method for the Management of Abortion.**—The curette snare consists of handle and shaft with continuous tunnel for carrying wires. It resembles very much the urethral sound with handle. It has two thumb screws on the handle for fixing and adjusting wires. It is thirteen inches in length and so constructed as to carry an assortment of wires round and flat. When armed with wire the smallest loop measures three-eighths of an inch, and being flat may be made with little force to pass the os of any pregnant uterus. After entering the organ the operator at his will may project any size loop he wishes for curetting and snaring purposes. The loop, after ensnaring the ovum gives a traction power of a hundred pounds, which is amply sufficient to either extract it or divide it. The wires are of spring steel and elastic, with sufficient resistance to plough through and break up an ovum without damaging the more resistant walls of the uterus. The wires are automatic in that they adjust themselves to the uterine wall in doing their work.

The operation which I will now detail, it must be understood, is intended to apply to the first three months of gestation before the development of ossification. When the structures of the fœtus become tough this instrument and operation are not suitable.

*Operation.*—In cases where there is nervousness and intolerance of pain use chloroform. Sim's position. Antiseptic precautions. Pass the smallest loop of the snare, armed with round wire into the uterus; enlarge loop half an inch and *tighten the thumb screw*. Have care not to rupture the membranes since they serve as a guide in determining the placental attachment. The site reached grasp the handle of the instrument firmly and urge the loop forward, backward and laterally using sufficient force to overcome the resistance.

Sweep the staff of the curette around the globe of the ovum and make sure of its complete severance. Now enlarge the loop to half its capacity and *tighten the thumb*

*screw.* To make "assurances doubly sure" renew the churning and scrape the uterus, as you would a mortar, with a thin spatula. In this ordeal, if the membranes are not ruptured with snare No. 2 with small watch-spring loop, the work is easily done. There could not be devised a better instrument for rupturing the membrane. For certainty, safety and celerity it cannot be excelled. Having ruptured the membranes the work of snaring begins. Snare No. 1 is reintroduced and a large loop sprung in the uterus. *Tighten the thumb screw*, and keep the snare moving until it hangs on the ovum. Now pull steadily and with increasing force until the ovum is either extracted or divided. In the latter event, repeat the operation until it is chopped into fragments easy of extraction. Snare No. 2 with watch-spring wire is used for rupturing the membranes and to follow the work of No. 1. It gives the finishing touches to the operation and completes the toilet of the organ. It is now passed into the uterus and its loop enlarged until it reaches the fundus. *Tighten the thumb screw* and with upward pressure cause the loop to rotate backwards and forwards until the residual placenta is scraped off its walls. Now, remove the detritus of the ovum with the snare, mop out the organ with a styptic antiseptic and wash the vagina with warm sterilized water.

This is the new operation. From the time the loop is first passed into the uterus its powers are aroused. When you pull on an ensnared ovum you invoke its best efforts at expulsion. Thus there is a coincidence of the processes of dilatation, detachment and expulsion, and they progress *pari passu* with the operation.—*Atlantic Med. and Surg. Four.*, May, 1892.

**Thomas (T. G.) on a Successful Case of Cæsarean Section.**—The operation consisted of the following steps:

1. A long incision was made, extending from about two inches above the umbilicus downward nearly to the symphysis pubis, and passing through the peritoneum.

2. Three sutures of silk, twelve inches long, were then passed at the upper extremity of this incision, and left untied.

3. The uterus was then lifted out of the abdominal cavity, and, being carefully enveloped in a moist antiseptic towel, was given into the hands of my first assistant.

4. A large flat sponge was then placed over the intestines at the upper extremity

of the incision, and the abdominal walls were closed over it by tying the three silk sutures already mentioned as being left loose at this point.

5. A bit of elastic tubing was then passed around the cervix uteri, and a single knot made in it, but no constriction was practised.

6. A small sponge was then put in the lower angle of the wound, and the point of exit of the uterus from the abdomen was carefully and thoroughly protected against possible entrance of fluids by moist antiseptic towels and gauze.

7. The uterus was then opened, first by history, and then the opening was enlarged by scissors.

8. The child's feet being then seized, it was removed; the cord was secured by clamps and severed, and the child, a large and vigorous boy, was given into the hands of an assistant.

9. The placenta, which was unusually large, was detached without effort, falling away like ripe fruit from a tree, and leaving less of a sign of its place of attachment to the uterus than any placenta that I have ever seen.

10. Slight hemorrhage occurring, an assistant tightened the cervical ligature and stopped it.

11. The uterus was cleansed with a sponge, and the cavity was dusted lightly with iodoform.

12. The uterine incision was then closed with deep sutures of silk, three to an inch, involving the uterine muscular tissue down to the mucosa, and with intervening superficial sutures of the same material, one to every interspace.

13. The uterus was then returned to the abdomen; the sponges, already mentioned as left at the extremities of the wound, were removed; the peritoneal cavity sponged out; the omentum drawn down over the uterus; and fluid extract of ergot injected into the patient's thigh hypodermatically.

14. The abdominal wound was then closed exactly as after an ovariectomy operation, with silk-worm gut suture; the ordinary antiseptic dressing applied, and the patient put to bed, with the directions that no food or drink be given, and that in case of severe pain the house surgeon should give morphia hypodermatically in moderate doses.

During the night it was found necessary to use morphia three times on account of pain, but no other indication developed itself.

The after-history of the case was so uneventful that there is no reason for exhibiting a chart of it.—*Med. Rec.*, May 14, 1892.

**Forest (W. E.) on a new Method of Artificial Respiration in Asphyxia of the New-born.**—1. Lay the child on its face for an instant with the head and thorax lower than the pelvis, and make quick but not violent pressure on the child's back. This is done to expel any fluids that may have been drawn into the child's mouth while passing through the pelvic canal.

2. Place the child in a sitting posture in a pail or tub containing six to eight inches of water as hot as can be borne comfortably by the operator's hand. The child is supported in this position by one of the operator's hands across the child's back, the child's head bent back and resting in

the crotch between the thumb and forefinger of this hand. The child's hands with the palms to the front are held in the other hand of the operator.

3. The child's hands are carried upward until the child is suspended by the arms, the buttocks just raised from the bottom of the pail. The child's head now falls back, and the operator leans forward, and, mouth to mouth, blows into the child's lungs.

4. The child's arms are then lowered until the hand of the operator holding them rests across the front of child's thorax. Then body of the child is doubled forward, and, at the same time, its thorax is compressed between the operator's hands, one in front the other behind. This expels the air from the lungs and completes the movements.—*Med. Rec.*, April 9, 1892.

## REPORT ON DISEASES OF THE EAR AND EYE.

BY A. T. MUZZY, M. D.

**Chevallereau on Treatment of Granular Conjunctivitis.**—Cocaine is first liberally applied. Then the lids being everted and held apart by the left hand, to the index finger of the right hand is attached a compress soaked in a 1 to 500 solution of corrosive sublimate and firm vigorous friction made over the entire conjunctiva of the lids and the canthi. Care must be taken to avoid the cornea with the solution, and the globe in the friction as in one old person the suspensory ligament broke under the friction. There is apt to be considerable hemorrhage the first time this procedure is carried out.

After the first time little or no hemorrhage takes place. Ulcerations of the cornea do not contra-indicate the use of this method only, atropine, four grains to the ounce, and salve of the yellow oxide of mercury is also used. The results of this method are very gratifying.—*Le Courier Med.*, June 4, 1892.

**Gould (G. M.) on a Method of Infection, Treatment and Prophylaxis of Purulent Ophthalmia.**—The writer makes use of the recent widely noted connection between nose and eye, especially the lachrymal canals, to explain the obstinancy of so many cases of purulent ophthalmia. The sound eye may be most carefully isolated, yet in the course of a few

days through this unsuspected channel, it presents the same process and many times proves the worse of the two eyes finally. He suggests as proper treatment the slitting of the punctum, and thorough cleansing and antiseptis of these neighboring surfaces of mucous membrane, and where one eye is surely infected the true prophylaxis of the fellow eye would be opening the canaliculus with antiseptic irrigation of it by spraying of the nose.—*Med. News*, June 11, 1892.

**Randall (B. A.) on Mastoid Abscess Breaking into the Digastric Fossa.**—Three cases of abscess in the mastoid breaking into the digastric fossa are recorded by the writer. As examples of a fortunately infrequent form of mastoid trouble they are instructive and interesting. Their points in common are: with severe general disturbance; pain, tenderness, some swelling along course of sterno-cleido-mastoid muscle; interference with action of lower jaw; steady, prompt progress of the inflammation; firm, solid bone on outer surface of mastoid, pus cavity in the course of the sterno-mastoid reaching to the digastric surface of the mastoid process. Treatment consisted in thorough opening of the cavity, scraping of bone down to healthy tissue by means of bone gouge, drainage connecting with the external auditory canal. The writer's judgment is in

favor of early operation, counselling great care in use of gouge, and because of connection occasionally with pharynx, the avoidance of all toxic antiseptic solutions preferring for himself peroxide of hydrogen. *Therapeutic Gas.*, May 16, 1892.

**Morton Charles (A.) on a Group of Tubercles in the Choroid Presenting Some Unusual Features.**—Five cases are presented. The points of interest in the first was formation of pigment ring from pushing and bending upon itself of the retinal pigment layer; the adherence of the retina to the tubercle; the large size of tubercle, exceeding in diameter the disc. In case 2, only two tubercles were found, both in the same fundus, and each of a size equal in area to the disc. Case 3 presented several large spots of pigment in the tubercle. Case 4 presented atrophic patches not to be distinguished from choroidal atrophy, while in another part of the fundus was a tubercle. The atrophic spots had pigment rings, the tubercle had none. Case 5 had twenty-five tubercles in one fundus and seventeen in the other. These cases were all subjects of general tuberculosis in childhood. Cases 1, 2, and 4, were examined post mortem.—*Brit. Med. Jour.*, June 4, 1892.

**Schwarzschild (H. D.) on a Case of Palimptosis Alternating with Proptosis, Following Injury.**—A coachman, twenty years old, fell when eight years of age, striking the forehead violently upon the ground. The wound promptly healed with a small scar just to the temporal side of the right supra-orbital notch. There is an absence of the fatty cushion of the orbit. The globe is of normal size, the palpebral fissure of 4 mm. larger than that of the opposite side. Vision of this eye is normal and fundus appears normal. There is no pulsation or bruit over this orbit.

When the patient bends forward the globe, which in the erect position is 6 mm. deeper in the orbit than its fellow eye, falls forward so as to be 12 mm. farther forward than in the erect position. While in this position, the ocular conjunctiva appears slightly congested, but this immediately fades out when the erect position is regained and the condition of palimptosis takes the place of proptosis. No similar case could be found reported.—*Med. Record*, May 14, 1892.

**Wood (C. A.) on the Toxic Amblyopias; Their Symptoms, Varieties, Pathology, and Treatment.**—The most frequent toxic amblyopia is that produced by tobacco and alcohol either alone or both together, but more often where both have been used. The frequency in America is inferred from the report of Alt's tables where out of 120 cases anæmic and atrophic conditions of the optic nerve 9 were cases from tobacco alone, 3 from alcohol alone, and 39 from use of the two combined. Uththoff's figures for Germany give 204 cases of retrobulbar neuritic affections out of 30,000 patients. Of these 204 cases alcohol alone produced 64, tobacco alone 23, and the two combined 45. In France Galezowski among 20,000 eye patients had 130 toxic amblyopia, due to the influence of both tobacco and alcohol and 21 to tobacco alone. After careful consideration the writer concludes for alcohol-tobacco that: (1) Both tobacco and alcohol alone and combined may produce toxic amblyopia. (2) It is probable that it is the nicotine in tobacco that produces the toxic effect. If this be true chewing is more injurious to sight than smoking, short pipes than long ones, old or unclean ones than new or easily cleaned pipes, mild cigars and cigarettes than strong cigars, and strong tobacco than mild. (3) The form in which alcohol is taken into the system has much to do with the amblyopic effects. The lighter forms of alcoholic beverages unless indulged in to great excess do not permanently affect vision. The same quantity of alcohol which when diluted, (as as beer and light wine), would be harmless, might be injurious to the eyesight if taken in the concentrated forms of whiskey, brandy, or gin. This is especially true when the latter are drunk between meals or when the stomach is empty.

Lead is the next most frequent source of toxic amblyopia. Painters absorb it through the skin, while those in factories reducing plumbic ores absorb it through the lungs also. A fatal case is referred to where in the brain and meninges alone an amount equal to five grains of the metal was found. Quinine though so widely used only rarely produces blindness. The quantity producing this effect ranges from as small as 80 grains in 30 hours to 1,300 grains in 72 hours. This effect has so far followed the pure drug only, yet from

general similarity the other forms are no doubt capable of producing same results. Morphia and Opium though having the well-known mystic effect on the iris has not been recorded as producing well authenticated blindness. The rare causes of this condition are venom of poisonous reptiles, carbolic acid, sulphuretted hydrogen, decomposed food, carbon disulphide, cannabis indica, iodoform cocaine, salicylic acid, and sodic salicylate.—*Annal. Ophthalm. and Otol.*, July, 1892.

**De Schweinitz (G. E.) on One Hundred Cases of Astigmatism Contrary to the Rule, and the Associated Symptoms.**—In all of these cases a mydriatic was used unless contraindicated by glaucomatous symptoms. The principal symptoms noted were: headache; dissatisfaction with presbyopic or plain hyperopic glasses; blepharospasm, symptomatic conjunctivitis; incipient cataract, chronic glaucoma, and reflex neurosis. The conclusions reached were that more than half occurred between the ages of 40 and 60; the majority were women, 69 out of the 100. While the degree of astigmatism varied from .12 of a dioptré to 2. dioptrés, the great majority were of low grades, from .50 to .90. The writer further concludes:

1. That the associated symptoms in these cases of astigmatism were not more severe than probably would be found in a similar number of examples in which the refraction error was according to the rule.

2. That useful results follow the correction of the least degrees of measurable astigmatism—results which are not obtained

when this correction is neglected, and that the mere presence of so-called normal central vision according to the ordinary best standards does not preclude the possibility of low degrees of astigmatism being present, which should be sought out and corrected.

That ocular health is conserved by such careful and thorough measurements of astigmatism, and hence indirectly general or so-called reflex disturbances are alleviated, but that these latter should never be ascribed solely to the astigmatism simply because this is present, when they may be the evident pointings of nature for relief to be obtained by measures directed toward an insufficient constitutional vice or insufficient nervous tone.

4. That the importance of low degrees of insufficiencies of the ocular muscles should not be estimated until the effect upon them of complete correction of the astigmatism has been obtained.

5. That while no doubt in careful hands excellent results may be obtained by ophthalmometry and skiaskopy with prolonged mydriasis, the patient does not obtain the very benefit which is often most essential by the use of the mydriatic, namely, its local sedative influence and the complete rest which a prolonged paralysis of the ciliary muscle entails. The most perfect correction placed upon an eye the subject of symptomatic retino-choroidal disturbance, fails to fulfil its function until the former has been subdued, and in its subjection prolonged mydriasis plays an important part.—*Four. Am. Med. Assoc.*, Sept. 5, 1891.

## EXTRACTS FROM RECENT FRENCH MEDICAL LITERATURE.

BY H. SOLOTAROFF, M.D.

**Sevestre and Galliard on Erysipelas.**—M. Sevestre illustrates a case where the only successful treatment of erysipelas has been antiseptic baths. The patient, a hospital attendant, entered the author's service for "erysipelas, which made its appearance on the right nostril. The cheek and ear on the same side have also been involved. The erysipelas spread itself successively all over the face, over the skin covered by hair, over the nape of the neck, and finally involved the trunk. The temperature was about 40° for ten days.

During that period vaseline and salol have been used externally and sulphate of quinine internally, which was afterwards replaced by salicylic acid internally, which though supporting the patient well, has not, however, in any way limited the spread of the disease. On the nineteenth day of the patient's stay at the hospital the erysipelas reached the umbilicus and lumbar region. Then the author prescribed baths containing 500 gr. of borate of soda, to procure complete antiseptics of the skin. The temperature

began to fall at once. These baths were continued for a few days with marked improvement in the condition of the patient and finally perfect cure. The author thinks it impossible in the face of this case to deny the efficacy of antiseptic baths in the treatment of erysipelas, and again thinks that sulphate of quinine as well as salicylic acid are altogether useless in lowering the temperature or limiting the progress of this disease.

Galliard draws his conclusions on erysipelas from a study of 350 cases (isolated) under his observation at St. Anthony's Hospital. Comparatively speaking, erysipelas is less contagious than the other eruptive fevers, and this is due to the use of antiseptics for prevention of contagion. He also thinks, contrary to M. Guyott's statement, that albuminuria is a frequent concomitant of erysipelas. "In the febrile state two out of every three cases have albumen in the urine. In six cases, says the author, there has been acute nephritis with or without hæmaturia." Heart affections as complications, though very variable, are rarely, however, a cause of death. Also articular symptoms rarely complicate erysipelas. M. Galliard uses on the limbs compresses dipped in phenic acid or in sublimate solutions. Scarification at the root of the members has given him good results. Boric vaseline, or the same with resorcin, the author prefers to use for the facial form of erysipelas. An ice bag, the author thinks, has in many cases produced real relief; for the throat the author uses a boric acid gargle.—*L'Union Médicale*, June, 1892.

**Vandervelde on Tubercle of the Pia-Mater.**—A very remarkable case is reported by the author on the above subject. The patient, a young man of thirty-five years, whose history presents no signs of hereditary tuberculosis or neurosis, and who had never before been internally sick, entered the service of St. Jean Hospital, suffering from an affection of a quite doubtful nature. The patient has been for several days confined to bed and the day before entering the hospital developed "a furious delirium accompanied by hallucinations. Grinding of the teeth and contractions of the upper extremities have been quite marked. Meningitic facies and a very accentuated vaso-motor paralysis have been observed. Fever has been moderate, never passing above 39.5° in its highest ex-

acerbation. In five days the disease exhausted the patient. On the eve before death, an agonizing fall of temperature to 35° took place, which was followed by voluntary stools and urination. Urine—sp. gr. 1024, contained no albumen and no sugar."

Those symptoms and the present pulmonary status, viz.: rude inspiration and crepitant râles with tympanitis on percussion prompted the diagnosis of tubercular meningitis.

The autopsy, however, showed "that on the level of the posterior part of the ascending parietal convolution, a round, whitish nodule, whose general diameter measured about 7 mm has been found. This nodule, under the microscope, appeared to be a tuberculous granule. It resisted incision. On perpendicular section of the convolution the neoplasm appeared to be cuneiform and extended deeply for 3 mm into the nerve substance. It was demonstrated on microscopical examination that the granule comes from the pia-mater. Upon the surface of the pia-mater, as the consequence of a tubercular meningitis a gelatinous, seropurulent exudation has been found. The meninges have been very congested and thickened at the periphery, but it presented no real adherence to the nervous substance. The cellular elements of the neoplasm have been completely destroyed, the morphological elements have disappeared, nothing has been left but a caseous mass. A search for tubercle bacilli after Ehrlich's method has given negative results." The autopsy then showed that this was primarily a case of tubercle of the pia-mater.

In conclusion the author wishes to call special attention to two most remarkable symptoms, which he thinks he can logically connect as cause and sequence to the pathogenesis of the case. These symptoms are: (a) The constant lowering of the *left eyelid*, and (b) a common direction of both ocular globes *towards the left*. These two symptoms do not appear to the author to depend on the exudation found on the surface of the pia-mater, but, as it has been demonstrated, in fact, by Ferrier that "in the posterior portion of the ascending parietal convolution are found the centres for conjugate motion of the sensorial reflexes of the eyes, and the motor centres for the upper eyelid of the *opposite side*" it becomes evident that the two given sym-

toms are dependent upon the pressure exercised by the tuberculous granule, which has been situated at the posterior portion of the ascending parietal convolution of the right side.—*Four. de Med. et Chir.*, June, 1892.

**Pilière on the Treatment of Croup.**—Pilière read a paper on the subject before the Paris Academy of Medicine. After the year 1890, said the author, he treated with the greatest possible success all diphtheritic forms of the disease in the following manner:

He washed out the pharynx morning and evening with a cotton brush dipped into a solution of nitrate of silver of 1:30 strength, detaching as much as possible of the false membrane. After each washing he atomized a solution of corrosive sublimate into the throat, using in cases of children above two years old 1:500 solution, or 1:1000 below that age. These pulverizations of the corrosive solution have been repeated every two hours during the day and every three hours during the night. Never has, in his hands, any accident of mercurial poisoning been constant or fatal.—*Le Scalpel*, June, 1892.

**Lucas-Championniere (Paul) on Simple Ulcer of the Duodenum.**—A woman entered the Hôpital de la Charité with hæmatemesis and all signs of an ulcer in the digestive tube, says the author. On examination it was found to be situated in the duodenum. For the sake of a more or less correct prognosis it became necessary to differentiate that ulcer from the ulcer of the stomach and to find out the peculiarities in the evolution of this lesion, and these are the conclusions to which the author comes after scrupulous study of the case under observation:—

"The ulcer of the duodenum is more rarely found than that of the stomach; situated at the first portion of that part, sometimes very deep, edges are thickened and appear as that of a cancer. Rapid death is possible due to perforation, but it is exceptional. Pain is less acute than in ulcer of stomach, food introduced relieves pain, which is always less radiating towards the shoulder blade as is the case in ulcer of stomach. The most characteristic symptom is perhaps that the appetite is quite conserved and that vomiting is less frequent. Gastrorrhagia, when present is more powerful than in ulcer of the

stomach. It is due to the peristaltic motion of the intestine, bringing thus the blood and bile into the cavity—but the symptom is a rare one. Death from hemorrhage is rare. Ulcer of the duodenum is found twice oftener in males, while the contrary is true of ulcer of the stomach. Alcohol, and especially its continuous use in the young is the most potent factor in the production of the disease. Phthisis is perhaps next in frequency the cause of gastro-intestinal ulcers." The prognosis in the case was favorable as vomiting was not excessive and soon stopped.—*Journal de Médecine*, June, 1892.

**Huchard on Digitalis in Renal Affections.**—Albuminuria and the different renal affections are generally regarded as contra-indicating the use of digitalis. With this Huchard does not agree. He thinks Lafon has proven that digitalis is not eliminated by the kidneys and that it is never constantly present in the urine, and therefore that it is most probable that the drug is destroyed in the organism before it ever reaches the kidneys. Again he cites those who think that digitalis is indirectly a diuretic, acting by augmenting the arterial tension and consequently having no injurious influence upon kidney affections as it does not act upon the renal epithelium. Huchard concludes on his own experience.

1. That digitalis administered in comparatively large doses is not injurious to the different renal affections; and, 2. That it is very useful, often diminishing the quantity of albumen not only in cardiac albuminuria, but also in albuminuria of parenchymatous nephritis.

M. Huchard communicated to the Société Médicale des Hôpitaux three cases to illustrate his points. But, cautions the author, "*ouvrir les voies à la digitale*." It seems necessary to work out a way for digitalis and this is how the author does it:—He enjoins for several days perfect rest and an absolutely milk diet. Diuresis, he thinks, commences thus before it is apparently seen. Then comes purging the patient and only on the morrow or next day he administers for once only 50 drops of 1:1000 solution of crystallized digitalin or .001 of the crystallized drug itself. Five or six days elapse before a similar dose in similar manner is administered, if symptoms persist.—*L'Union Médicale*, May, 1892.

## REPORT ON NOSE AND THROAT DISEASES.

BY H. HOYLE BUTTS, M.D.

**Bowen (W. S.) Reports a Fatal Case of Laryngismus Stridulus in an Infant Six Days Old.**—The infant, female, weighing fourteen pounds at birth and apparently perfectly healthy, on the morning of the sixth day exhibited difficulty at nursing. It would seize the nipple for only about a minute at a time, its breathing seeming to be interfered with. On examination of the pharynx and nose nothing beyond a slight rhinitis could be detected, nor was there any glandular enlargement of the neck. The child began to have paroxysms of dyspnoea which increased in intensity, the inspiratory act becoming more stertorous until finally suspended. This condition was accompanied by general tonic convulsions involving nearly all the muscles of the body and extremities. After a period of a minute, the spasm relaxed, the pulse returned, also the respiratory movements. The child would then be perfectly comfortable. Potassium bromide in gr. j doses every half hour, was administered throughout the day and inhalations of chloroform began at midnight. Patient was nourished by breast milk, drawn and given from a spoon. Died four hours later, apparently from exhaustion. As the author states, treatment in this case was without effect and advises the early use of chloroform by inhalation to mitigate the severity of the paroxysms and prevent their recurrence.—*Medical News*, April 16, 1892.

**Watson (Spencer) on the Influence of Intra-Nasal Obstruction on the General Health.**—Starting with the text that in many forms of disease, not obviously of nasal origin, patients have been cured or relieved by treatment directed against nasal stenosis, the author gives a brief epitome of the functions of the nose as part of the respiratory tract and draws attention to the varieties of stenosis as (1) partial, (2) complete, (3) temporary, (4) permanent. His conclusions are: (1) That by suitable treatment directed against stenosis we may in young children prevent convulsions, deformity of the chest with its concomitant evils, and in some cases prevent death from marasmus; (2) that in youth and early life by relief of stenosis we

may prevent deafness, impairment of speech, and even of the mental faculties; (3) that in adult life we may prevent, and in some cases cure, by the relief of nasal stenosis, asthma, spasmodic cough, bronchitis with its complications, and various mental disturbances.—*The Lancet*, March 5, 1892.

**Mackenzie (Hunter) Reports on a Case of Empyema of the Antrum of Highmore, with Ozæna.**—In this case the right chamber was involved and there were present all of the usual symptoms accompanying this disease. The upper teeth were much decayed on both sides. Three stumps of teeth were extracted, and the right antrum was perforated through the situation of the first molar, its cavity was thoroughly curetted, washed out with a warm alkaline solution, and then with a solution of boric acid. No tube was inserted, but the opening was plugged with carded cotton. Its potency was thus maintained for ten days, during which irrigation and insufflations of boric acid were employed. The discharge of pus from the antrum and nose ceased at this time. The condition of ozæna was treated successfully by repeated applications of blistering fluid to the diseased membrane of the nose. Canthos cotton was also frequently used in the later stages of the treatment.—*British Med. Jour.*, April 9, 1892.

**Hall (F. DeH.) on Erysipelas of the Pharynx and Larynx.**—Four cases are reported with one recovery and an outline of the treatment pursued by the author, which is as follows:

The patient should be kept in bed in a room with a temperature of about 60° F. An ice collar should be applied to the neck, and he should have pellets of ice to suck. If the patient be seen early, and the disease is confined to the pharynx, 20 minims of tinct. ferri perchlor. with the same amount of glycerine may be given every three or four hours; if, however, the larynx is implicated, and there is any tendency to spasmodic attacks of dyspnoea, 10 to 20 grains of bromide of potassium should be administered instead of the iron mixture to diminish the tendency to spasm of the glottis. If, in spite of this treatment, the



symptoms of laryngeal stenosis increase, the pharynx and larynx may be painted with a 20 per cent. solution of the hydrochlorate of cocaine.

The question of tracheotomy will, of

course, have to be considered in these cases, and if death threatens from obstruction to the respiration, it is clearly the duty of the surgeon to obviate the tendency to death by opening the windpipe.

## REPORT ON THERAPEUTICS.

**Asaprol, New Antithermic and Antiseptic.**—This is the name given by Bang, its discoverer, to a calcium compound of a alpha-monosulphone of beta naphthol (*Nat. Drug.*). The preparation of the substance demands the use of a naphthol entirely free from alpha-naphthol. It is a neutral substance, soluble in water and alcohol, unalterable under heat, non-irritant, non-toxic, well tolerated by the digestive viæ, whence it is rapidly eliminated and carried off by the urine. Asaprol retards cultures of bacillus typhoides, the cholera bacillus and the micro-organism causing herpes tonsurans, when used in quantities of 1 cg. to every cubic centimetre of the culture. When the quantity of asaprol is increased to 3 cg. to each cubic centimetre, the growth of these organisms is entirely prevented, though it requires double this proportion to prevent the growth of bacillus pyocyaneus. Streptococcus aureus and bacillus anthracis are controlled by a three per cent. solution. Administered to man in doses of from 1 to 4 gm. asaprol, acts as an antithermic, and has been found useful in typhoid fever. It has proved highly effective in acute articular rheumatism, in which it bids fair to be very useful.—*St. Louis Med. Review*, July 23, 1892.

**Bungier (J. T.) on Intolerance to Potassium Iodide.**—A mulatto, aged thirty-eight, was ordered five grains of the salt three times a day. After taking the second dose he was suddenly seized with intense pain in the forehead, eyes, and teeth, with hypersensitiveness in the area of distribution of the trifacial nerve.

There were also marked œdema of the of the eyelids, injection of the conjunctivæ, lachrymation, and profuse nasal discharge.

All the symptoms abated within three days upon suspending treatment. When medication was resumed one week later, only half of the original dose being exhibited, the symptoms recurred, but in a modified form.—*Phil. Med. News*, July 16, 1892.

**Belfield (W. T.) on the Use of Iodine Trichloride in Surgery.**—This compound has the formula  $ICl_3$ , and is made by passing chlorine gas over iodine. The result is a reddish crystalline substance emitting an odor of chlorine. It dissolves in its own weight of distilled water and almost as readily in alcohol. During the past six months I have used the trichloride, at first occasionally, later continually. The cases may be summarized as follows:

1.—*Surgical Tuberculosis.*—Iodine with its compounds has long been the surgeon's chief remedy for local use against tuberculosis; I therefore expected decided effects from the trichloride in these cases, and have not been disappointed. Of a considerable number so treated comparatively few can be adduced as proof, because in most of them guaiacol was also administered internally; since the latter is an unmistakably powerful agent against surgical tuberculosis—as I know from a year's experience with it—the benefit derived from the mixed treatment cannot be ascribed solely to the trichloride. The following cases were, however, treated with the trichloride alone: Two of bladder tuberculosis (diagnosis confirmed in one case by presence of the bacilli, in the other by the discovery of a distinct ulcer); two of epididymis tuberculosis with fistulæ (the latter rapidly closing under hypodermic injections, for the first time in years); one of tubercular abscess of prostate; six of suppurating tuberculous cervical glands; two of tuberculosis of knee-joint in children; one of tubercular empyema.

2.—*Suppuration.*—A miscellaneous line of cases, including infected wounds, abscesses, and malignant ulcerations.

3.—*Ammoniacal Cystitis.*—Six cases caused by retention from prostatic enlargement.

4.—*Venereal Sores.*—A detailed account of individual cases would be out of place in this communication; the results may be summarized in the statement that, in a

reasonably extended experience and observation, I have never seen tuberculous processes so rapidly subdued by iodoform, nor suppuration by hydrogen peroxide, iodoform, or any other agent.

I have employed it in the following forms: For hypodermic use, one-tenth to one-half per cent. solution in distilled water alone, or water four parts, glycerine one part. (In experiments on animals I have seen sloughing follow the hypodermic use of a two-per-cent. solution).

For instillation of deep urethra and irrigation of bladder, and for injection of serous cavities, the same solutions. For suppurating wounds, irrigation with one to five per cent. solution in water, either alone or with glycerine. For putrid surfaces (cancerous), venereal sores, etc., five- to twenty-per-cent. solution in equal parts of water, glycerine, and alcohol.

Solutions stronger than five per cent. usually cause decided smarting in ordinary wounds. The crystals are caustic to denuded surfaces. Gauze sterilized by boiling, immersed in one to ten per cent. aqueous solution and dried, retains the compound for an indefinite time.—*N. Y. Med. Rec.*, July 16th.

**Lyson (J. C.) on Paraldehyde, Hypnotic and Diuretic.**—The writer gives the history of a case of senile arterial degeneration with considerable mental depression, restlessness, marked insomnia, and where there existed a double aortic murmur, with a mitral regurgitant and enlarged left ventricle. He was induced to try the drug after unsatisfactory results from sulphonal, urethane, chloral, etc. At first forty minims in peppermint water were given, and this was followed by a state of comparative restfulness, though sleep was not induced. Two hours later, the pulse being unchanged, thirty minims more of the drug were administered, and within half an hour the patient dropped quietly to sleep which lasted, more or less, for four hours. It was described as being more refreshing than that produced by sulphonal, and not accompanied by the same depression and uncomfortable sweating. The offensive odor of the drug, however, was objected to, and this could be detected in the patient's breath during the next forty-eight hours.

In about three weeks from the last administration of paraldehyde cardiac compensation began to fail, and there was

considerable dropsy about the ankles and half way up the legs. Remembering the diuretic action exhibited by paraldehyde, L. was induced to again have resort to the drug with the hope of getting rid of the dropsy. Ninety minims were given at 10 P.M. Within twenty minutes the patient was asleep, though his rest was disturbed by the muscular twitchings and restless movements already mentioned. At 12 midnight he had become quieter, but was not asleep. The pulse being satisfactory and not apparently affected by the hypnotic, another drachm was administered and further snatches of sleep were induced. Altogether, with two drachms and a half of the drug, something like three hours' sleep were procured, and followed by several hours of quiet and drowsiness. During the following day the weakness and unsteadiness of gait were very marked, the patient walking with difficulty and having to steady himself by catching on to objects in his room. But the most striking result was the complete disappearance within twelve hours of the dropsy, which had persisted more or less for a week, and the accompanying presence of polyuria. It seems to L. that, so far as his limited experience of the drug goes, paraldehyde may be looked to as a fairly reliable and safe hypnotic, that its administration is followed by a well-marked stage of excitement, that it does not depress the heart's action, does not interfere with the appetite or digestion, possesses probably diuretic properties, and induces a sleep which is described as "refreshing."  
—*London Lancet*, July 23, 1892.

**Maurel on the Action of Strychnine upon the Leucocytes.**—Experiments with the sulphate of strychnine lead the author to conclude: (1.) That five centigrammes of the sulphate of strychnine is sufficient to rapidly kill the leucocytes in one hundred grammes of human blood, representing about one kilogramme of the body-weight. (2.) That under doses of two centigrammes of the drug, for the same quantity of blood, the leucocytes can only live a few hours, the fatal result, though tardy, being the same. (3.) That in poisoning by strychnine, the death of the leucocytes and that of the animal occur simultaneously. (4.) That the death of the elements of the blood under strychnine is due to a direct action, and *not* to the death of the animal; since in other poisonings, notably those produced by curare and

cyanide of potassium, the leucocytes survive the death of the animal. (5.) That in all these experiments the hæmoglobin remain unaffected, even after the death of the cells. (6.) That, finally, to judge from the general results obtained, especially from the simultaneous death of the animal and the leucocytes, these play an important rôle in the poisoning by strychnine.—*Bull. Gén. de Thérap.*, March 30, 1892.

**Berlioz on an Experimental Study of Formol.**—B. publishes in *Les Nouveaux Remèdes* for March, 1892, a paper upon formol, or formaldehyde. He finds that it is a powerful antiseptic, destroying growths of the bacterium coli commune, the bacillus of Eberth, and that of Charbon.

It prevents the putrefaction of urine, or of bouillon, in the proportion of 1 grain to the 1,000, and therefore ranks among the best antiseptics. Its toxic power is represented by the fact that a subcutaneous injection into a rabbit, in the proportion of five grains to the pound, does not produce death. If given in the quantity of eight or ten grains to the pound it produces instant effects, the animal at once going to sleep, and finally dying without convulsions.

Intravenous injections of one quarter of a grain to the pound are without effect in the rabbit. In the dog, death ensues after the intravenous injection of three quarters of a grain to the pound. It is completely eliminated by the urine in about twenty-four hours, and this secretion remains for twenty-four hours after, without undergoing any putrefactive changes. On the second day slight putrefaction ensues. Formol lowers the bodily temperature of animals  $1^{\circ}$  to  $2^{\circ}$ . It is interesting to note that Berlioz attempted without success to preserve guinea-pigs from the infection of Charbon by treatment with formol.

Berlioz finally concludes his paper by stating that while formol is an antiseptic dressing and germicide, he would not recommend it as a surgical antiseptic.—*Therap. Gaz.*, July 15, 1892.

**Medication by Diurnules.**—Very recently Trouette recommended in the *Bulletin Générale de Thérapeutique* that a method of duodecimal medication be instituted, in which twelve pills or tablet triturates should contain the dose suitable for administration in twenty-four hours, and therefore each tablet or pill would represent one twelfth of a daily dose. By

this means the physician is enabled to carry with him, in a condensed and accurately-divided form, the most active drug without the necessity of employing scales or remembering a long string of doses. The original manufacturer is responsible for the dose, the amount of which is placed on the label of the bottle. Even if the dose is not given, the remembrance that each twelve tablets represent a diurnal or daily dose is sufficient. Further than this, the tablet triturate may be marked by cross lines, so that with a knife-blade it may be cut into halves or quarters, thereby still further subdividing the dose when desirable, as in the case of children.

The rapidly-increasing employment of triturates is sufficient evidence of their well-deserved popularity, and this extra advantage is one which must prove a vast relief to the mind of the practitioner, who no longer must worry over possible mistakes on his or the druggist's part in the dispensing of his remedies.

Probably the best name for these preparations of duodecimals is the word "Diurnules," which at once distinguishes them from triturates on the one hand and granules or pilules on the other.—*Therap. Gaz.*, July 15, 1892.

#### A Formula for Administering Creasote.

B	Creasote (beechwood).....	℥ vii.
	Cognac.....	℥ i. to ℥ ii.
	Syrup.....	℥ v.
	Spirits of peppermint.....	gtts. xxx.
	Seltzer.....	℥ viii.

Dose. *Pro re nata*.

—*Pharm. Post—Therap. Gaz.*, July 15, 1892.

**For Weak Digestion.**—For weak digestion there are an infinite number of medicinal agents that are reputed to be efficacious. Some are so, but the most of them are practically valueless; nor are there any that the layman can use unadvised that are likely to do good except in occasional cases. If the digestion of those who insist upon practising upon themselves is weak, instead of using the popular preparations of the market, they will do well to try that mild tonic, chamomile tea.

It is made by adding half an ounce of the flowers to a pint of boiling water. This should be allowed to stand for ten minutes in a covered vessel, after which it should be strained and put away in a cool place. It will be a good plan for the dyspeptic to

sip a cupful of very hot water an hour before meals, and just before sitting down to the table, to drink a large wineglassful of the cold tea made as advised. If the diet is properly regulated, and indigestibles are excluded, and there is no actual disease of the digestive organs, this mild and simple treatment will prove as effectual as any system of drugging that the sufferer from weak digestion can self-apply.—*Bost. Fourn. Health*, July, 1892.

**Anodyne Sinapisms.**—Mustard can be used advantageously as the menstruum for anodynes in the form of external application, and without destroying its value as a counter-irritant. The mode of application consists in mixing the mustard into a thick solution either with olive oil or with glycerine, and then incorporating the anodyne, opium, tincture of aconite, cocaine, belladonna, or other narcotic. The vascularity caused by the mustard favors absorption, and an insensibility amounting to a slight local anæsthesia can be induced by this simple method.—*Asclepiad.*, July, 1892.

**Hyde (O. A.) on the Treatment of Cysts and Abscesses by Papoid and Peroxide of Hydrogen.**—H. reports one case of sebaceous cyst of the leg and one of perineal abscess—treated in the manner indicated. He makes but a small incision so as to allow of the injected fluids being the better retained. His solution of papoid is as follows :

Papoid.....	15-20 grammes
Bicarbonate of soda.....	5-10 "
Water.....	100 c. c.

He injects the sac or abscess cavity full of this solution after pressing out the pus, and leaves it in for a varying length of time. It is then pressed out and the hydrogen peroxide solution introduced. He believes the plan of treatment a good one.—*Med. and Surg. Rep.*, July 2, 1892.

**Hunt (J. H.) on Bichromate of Potash as an Expectorant.**—H. thinks that this property of the salt is a valuable one which has been greatly overlooked. In medicinal doses he says it is practically tasteless, and in my hands more efficacious than the nauseous chloride of ammonium which most of us use in about the class of cases in which I use the bichromate. The salt in its crystallized form of garnet-red prisms of resplendent lustre, is soluble in twelve parts of water at ordinary temperature, and in equal parts of boiling water. It is best

administered internally in the form of an aqueous solution, but this is liable to decomposition if kept too long. I have for years kept it in the form of a trituration of one part with nine with sugar of milk, which I dissolve in water at the bedside. Lately some of our tablet makers have been putting up tablets of this trituration, each tablet containing  $\frac{1}{10}$  grain, which is a minimum dose for a child one year old. It is insoluble in alcohol and is rapidly decomposed in glycerine. I find it taken and borne readily by the youngest infant, unless given within a few minutes of feeding with milk, with which it seems to be incompatible, so that when the administration of the medicine is at very short intervals, milk-feeding must be, for the time, suspended. I am accustomed to give it to a child one year old in  $\frac{1}{10}$  grain doses, at first at frequent intervals, when the symptoms of suffocation are distressing or the breathing very rapid; I administer a dose every fifteen or thirty minutes until I see some amelioration of the symptoms, and then diminish in frequency to one hour intervals. If the interval is prolonged more than one hour the effect seems to die away. If it should cause emesis diminish the dose. It is especially applicable in cases of bronchitis where there is a thick tenacious mucus which is dislodged with difficulty.—*Internat. Med. Mag.*, July, 1892.

**Iodoform as a Local Anæsthetic.**—The article is the plea for the use of iodoform when cocaine or carbolic acid are inadmissible. It is capable of producing an æsthetic of the mucous membranes of the rectum or vagina, mucous membranes which resist the anæsthetic power of cocaine because of the density and thickness of the epithelium in those parts, unless the cocaine be used in unusually large amount.

Physicians who have under their care cases of fissure of the anus, in which condition, when well developed, the pain is so severe as to be beyond endurance, will be able to give their patients relief by the use of an iodoform suppository, containing 5 to 10 grains of the drug. After it has been in the rectum for a short period of time, a movement of the bowels may take place with comparatively little discomfort. This a valuable therapeutic point in connection with the treatment of hemorrhoids by operative procedure, and in operations upon the perineum, where the discomfort and pain which follow are in great excess of the severity of the operation, disturbing the patient's rest

and straining the nervous system. While it is true that an opium or morphine suppository under such circumstances will bring relief, the frequency with which disagreeable general systematic manifestations occur incident to the action of this narcotic prohibits its employment in the large majority of cases, particularly as it frequently intensifies the after-depressant effects of the anæsthetic.—*Therap. Gaz.*, July 15, 1892.

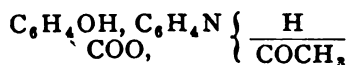
**Caton (R.). Antiseptics in Typhoid Fever.**—The paper is an analysis of forty-six cases of fever and a plea for the use of intestinal antiseptics in the treatment of the disease. Of 44 cases, half the total number took regularly a drug which was intended to produce intestinal antiseptis. The results of this latter treatment have been satisfactory, but before stating them I wish to say I tried several antiseptics, namely, salicylate of soda, creasote, naphthalin, and alpha-naphthol. Six cases were treated by the first drug; all recovered, but still I believed the salicylate to have a nauseating and depressing influence. The average stay in hospital was prolonged to fifty-six days. I have, therefore, abandoned the use of the salicylate in enteric fever. I have observed no bad results from the use of creasote, naphthalin, and the alpha-naphthol. The average stay in hospital of 16 cases treated by one or other of these was forty-two days; the average stay in hospital of the 22 cases, including those treated by salicylate, was forty-six days. As to the cases treated by the expectant method of whom, as I have said, 4 died, the average stay in hospital of the remaining 18 who recovered was 52.1 days. The average duration of pyrexia of the 22 cases treated by antiseptics was 25.3 days. From the same number treated by the expectant method I deduct 4 who died and 2 whose charts have been lost. The average duration of pyrexia of the remaining 16 is 37.9 days. The most striking point in the comparison of the two groups is the immunity from relapse enjoyed by the cases which were treated by intestinal antiseptis. Of the 22 cases the average days of relapse were 1.8, while among the 16 cases who recovered under expectant treatment and whose charts are preserved, the average days of relapse were 9.

Stated in tabular form the total results are as follows:

—	Deaths.	Days of Fever.	Days of Relapse.	Days in Hospital.
Expectant treatment	4	37.9	9	52
Intestinal antiseptis	—	25.3	1.8	46

Watching these cases from day to day I have been much impressed by the apparent good effects of the intestinal antiseptic treatment. It is obviously a rational method. There is considerable evidence that such bodies as chlorine, creasote, naphthalin, iodine, iodoform, and alpha- and beta-naphthol are destructive to septic and poisonous compounds and organisms found in the intestinal canal. It is therefore, antecedently probable that they would be of service. The naphthalin which C prefers, is given in full form, three or four grains, six or eight time daily.—*Brit. Med. Jour.*, July 23, 1891.

**Flint (W. H.). Salophen in Acute Rheumatism.**—Salophen, or acetyl-para-amydosalol, occurs in the form of white crystalline scales, almost insoluble in water, more soluble in hot water, but fairly soluble in alcohol and ether, particularly with the aid of the heat, and is without taste or odor. According to Dr. Siebel, of the Elberfeld Chemical Works, formerly Friedrich Bayer & Co.'s, the formula of salophen is



and it contains fifty-one per cent. of salicylic acid. Dissolved in caustic soda and heated to the boiling point, salophen splits up into salicylate of soda and acetyl-para-amydophenol, the liquid then assuming a violent or blue color. Both these component parts may be demonstrated by appropriate tests. The same separation of salophen into its constituent element takes place in the animal body, since salicylic acid and acetyl-para-amydophenol can both be recovered from the urine of those who have taken the drug. Flint has used the remedy in six cases of acute rheumatism in fifteen-grain doses given dry upon the tongue every three hours, together with sodium bicarbonate (ten grains, thrice daily). From the histories it will be seen that in

all the cases, except the last, the pain was quite relieved, the redness dispelled, and the temperature reduced to the normal point on the second or third day of treatment. In the one exceptional case the patient, being a poor woman in need of an asylum, may have exaggerated the intensity of her pain for the purpose of prolonging her sojourn in the hospital. No deleterious effect was noted upon the heart or gastrointestinal tract. The urine was unaffected by the remedy. There were no relapses or cardiac complications. The writer has also tried salophen in a number of cases of chronic rheumatic arthritis with very poor average results, although there have been one or two notable exceptions to this general rule.—*N. Y. Med. Jour.*, July 30, 1892.

**Foxwell (C.) on the Treatment of Anæmic Debility.**—The following are examples of the prescriptions I should advise so far as the mere drug treatment of anæmic debility is concerned.

**R** Træ. digitalis.....  
Træ. nucis vomicæ.....  
Acid hydrochlorici.....aa ℥ x.  
Aquam.....ad 3 j.

Sig.: To be taken thrice daily after meals.

**R** Pulv. digitalis.....  
Quiniæ sulphatis.....aa gr. j.  
Extr. nucis vomicæ.....gr. 4  
Exc. q. s. ut fiat pilula una.

Sig.: To be taken thrice daily after meals.

**R** Liquoris strychniæ.....℥ v.  
Sodæ bicarb.....gr. v.  
Træ lupuli.....3 j.  
Aquam.....ad 3 j.

Sig.: To be taken thrice daily before meals.

Further, I would not have you forget the efficacy of mere local mechanical treatment for the strengthening of the heart when this organ is distressing the patient with its dilatation and palpitation. Strips of belladonna plaster an inch and a half wide, of sufficient length to reach from sternum to spine, and so applied that they cross one another at an acute angle, the point of crossing being situated over the apex beat, are often a great help in quieting the heart's action. Six to eight of such strips should be applied just as one straps the chest for the pain of acute pleurisy. They should be renewed every three or four weeks, and persevered with for six or eight months.—*Birmingham Med. Review*, July, 1892.

**Duncan (J. T.) on Treatment of Whooping-Cough by Bromoform.**—Five cases are reported. Dose was ℥ ii—iii in water three times a day.

The results may be thus stated: (1) Bromoform in the doses stated is a perfectly harmless remedy. (2) The attacks diminish in number and severity. (3) The first paroxysmal vomiting disappears in two or three days. (4) Nasal and other forms of hemorrhage soon disappears. (5) It acts beneficially in complications, largely by giving affected organs, e.g., lungs, a chance to rest. (6) It undoubtedly shortens the duration of the attack (Stepp, 2 to 4 weeks; Scheppers, 8.)

Bromoform is a heavy sweetish liquid. It is best given dropped in a teaspoonful of water. Given thus, children like it; but be sure the drops are swallowed, as they sink through the water on to the spoon. It must be dispensed in small amounts, and kept from the light, as it is apt to change.—*Can. Pract.*, July 15, 1892.

**Gibson (G. A.) on Antiseptic Treatment of Pernicious Anæmia.**—In a paper recently read before the Edinburgh Med. Chir. Soc., the author referred to a case in a man of fifty-five, who had lived abroad, who had in his family a highly neurotic strain, as is common in pernicious anæmia. He had had a stone in the right kidney, and had suffered from paroxysmal hæmoglobinuria. His skin was lemon color. There was œdema of the lower extremities, there was a large, pale, flabby tongue, and constipation. The red corpuscles were down to 800,000, and megalo-cytes, microcytes, and poikilocytes were present. Arsenic was carefully tried, but produced great gastro-intestinal irritation, and had to be abandoned. Iron was useless. He was transfused by Mr. Cotterill on March 3d last, when 6 ounces of human blood in saline solution were injected. There was a gain of 200,000 red corpuscles in two days. This fell in a few days to a lower figure than before. He was now put on peptonized food, and on  $\beta$ -naphthol, 2 grains in pill form thrice daily. There was soon a rapid improvement in the red corpuscles, they rose to 1,000,000, 1,700,000, 2,080,000, and finally to 2,320,000, while his weight had correspondingly risen to 12 st. 1 lb. Dr. Gibson also gave notes of a case of similar anæmia which had been improved by  $\beta$ -naphthol.—Dr. Strachan, Dollar, referred to his experience of such cases, and specially to one, which seem to be of the nature of Addison's anæmia, and which had been greatly improved by minute doses of Fowler's solution. He referred

also to the character of the stools in such cases, their paleness and offensive odor.—*Brit. Med. Jour.*, July 16, 1892.

**Harley (G.) on Visceral Phlebotomy.**—Harley advocates withdrawal of blood, as described by him, in all cases of inflammation and congestion of internal organs having no circulating connection with the skin.

For those about to have recourse to it as a curative measure for the first time the following hints may, perhaps be of service:

1. If it be deemed advisable to render the patient insensible, induce anæsthesia of the skin at the point selected for puncture, by the local application of cocaine hydrochlorate.

2. Select the seat of puncture, and give such a direction to the trocar as will insure the point of its entrance into the organ being brought into direct contact with the parietes by the application of pressure to them by a bandage after the completion of the operation, in order that the mouth of the wound in the organ may be thereby readily and effectually closed.

3. Let the trocar or aspirating needles be of the size of a No. 2 or 3 catheter, and sufficiently long to penetrate deeply into the organ operated on, without there being any risk of entirely transfixing it.

4. Let the direction of the instrument be such as to avoid its puncturing any large bloodvessel.

5. When all these points have been attended to it will save the patient pain if the instrument be rapidly and at once thrust into the organ to the full depth it is intended to puncture.

6. If no blood flows, then slowly and by distinct degrees withdraw the canula, in the hope that a sufficiency of blood will ooze from the transfixed capillaries into the canal made in the organ by the instrument, as will yield a free stream, and enough for the required purpose.

7. When the wished-for amount of blood has been obtained, before withdrawing the canula altogether from the organ, but just before it leaves it, in order to obtain a blood-clot-cork to stop up the wound with, place the finger on the mouth of the canula, and keep it there until a clot has had time to form, both in its interior and in the canal made in the organ itself by the instrument.

8. The next point is to get the clot in the canula to break off from that in the end of

the canal, so as to leave the latter behind, in order that by its presence there it may prevent any oozing of the blood from the organ after the withdrawal of the instrument. This is best done, I think, by giving a slight twist to the canula at the moment it is felt to leave the organ. And the resilience of the tissues of the organ will cause them to contract sufficiently firm round the clot within it to prevent its being drawn out along with the canula.

9. All that now remains to be done is to place an inch-sized square piece of adhesive plaster over the seat of the external puncture, and bind a pad over it, with a long flannel bandage sufficiently firm, so as to insure the internal surface of the parietes being brought into close contact with the orifice of the wound in the organ, the more effectually to prevent the possibility of accidental internal hemorrhage taking place.—*Phil. Med. News*, July 23, 1892.

**Smith (O. C.) on Enema for Phthisical Diarrhoea and for Chronic Dysentery.**—First give the patient a hypodermic of  $\frac{1}{16}$  gr. sulph. atropia; wait half an hour, place the patient in Sims position, clothing loose; then cleanse the rectum by repeated washing with Packer's tar soap—water of mild strength and as hot as can be borne. This cleansing lavement should be introduced very slowly through a small, soft, oiled catheter as far in the bowel as possible, and in as large a quantity as the bowel can be made to hold, without pain, with moderate pressure. The bowel being well cleansed and emptied, then very slowly inject, through same catheter, as far up the bowel as possible, one to two ounces of a mixture made as follows: Oil sassafras, oil camphor, and eucalyptol, each 3 i.; lanoline (or some other very bland oil), q. s. ad. f.  $\frac{3}{4}$  viij.

This operation may be repeated one to three times a day, as the case may require, and the oil mixture may be made milder should it cause severe pain, which rarely, if ever, occurs.—*So. Pract.*, Aug., 1892.

**Dixon (S. C.) and Hughes (W. E.) on a Preliminary Report on the Action of Creatin upon Tuberculosis in Human Beings.**—Owing to the results obtained in cattle by Zuill, we have instituted a series of experiments on human beings. A solution of creatin was made in normal salt solution or in distilled water, and the injections practised either in the lumbar or gluteal regions. The cases used

were selected at random, the only care taken being to get those the undoubted subjects of phthisis. During the experiments they were kept under exactly the same conditions as had environed them previously. The temperature results are presented below, no especial comment being thought advisable in the present incomplete stage of the investigation :

**Case 1.**—Man, aged thirty-six years. Family history of phthisis. His illness dates from an attack of influenza in 1890, and has been characterized by the ordinary symptoms of phthisis—cough, profuse expectoration, fever, and hemorrhage. The left lung is broken down into large cavities at the apex, and is universally infiltrated below. In the right lung the lesions are pronounced but less advanced. Ordinary examination of the sputa failed to show tubercle bacilli, but there can be little question of the tubercular nature of the lesions.

**Case 2.**—Man, aged fifty years. Universal infiltration of lungs, the right at the apex breaking down into a cavity. Tubercle bacilli found in sputa.

**Case 3.**—Man, aged forty-five years. Rather extensive infiltration of lungs, most marked at apices. No cavities. Tubercle bacilli found in sputa.

**Case 4.**—Same patient as was represented by Case 1.

**Case 5.**—Man, aged twenty-two years. Disease of very recent origin. Only prominent symptom being profuse hemorrhages. Slight infiltration at apices, most marked on right. Tubercle bacilli found in sputa.

While the cases are too few in number to enable us to base any positive conclusions upon them, yet they seem to be negative in results, and would suggest a careful revision of the results obtained by Dr. Zuill.

Should further results obtained by Dr. Zuill in his experiments upon cattle substantiate the apparently negative results of the above investigations, it will point to the probable error of placing too much dependence upon a normally wide range of temperature which is so often established in cattle.

There was no apparent effect by the creatin upon any of the physiological processes of the body nor upon the general condition of the patients. The experimentation will be continued until the whole ground of tuberculosis is covered thoroughly, when it will be possible to

present perfectly definite results.—*Phil. Times and Register*, June, 1892.

### Wells (E. F.) on Dietetic Management of Consumptives.

#### MENU.

*On Rising, 6 A.M.*—Hot milk and Vichy. Hot meat broth. Milk tea, tea made with milk.

*Breakfast, 7 A.M.*—Rare steak or loin chops. Mutton chops with fat. Bacon or ham, with fat. Eggs. Potatoes, Saratoga chips. Fried mush. Toast, with cream or butter. Oatmeal, wheaten grits or rice, with cream. Fruit. Coffee or cocoa, made with rich milk.

*Lunch, 10 A.M.*—Milk. Egg nogg. Meat broth. Stale bread. Zweiback.

*Dinner, 12:30 P.M.*—Beef, mutton or chicken broth. Oyster or turtle soup. Raw oysters. Raw clams. Fish. Poultry. Roast beef or mutton. Game. Potatoes. Cauliflower. Green peas. Tomatoes. Celery. Pickles. Asparagus. Lettuce. Spinach. Stale bread. Graham bread. Corn bread. Baked apples with cream. Ripe fruits. Custard pudding. Pie. Cake. Milk. Milk coffee.

*Lunch, 3:30 P.M.*—Milk. Koumyss. Clabber. Beef tea. Thick soup. Meat broth. Ham sandwich.

*Supper, 6:30 P.M.*—Thick meat or fish soup. Raw oysters. Cold meats. Stale bread. Crackers. Graham bread. Meat jellies. Neufchatel or Cottage cheese. Fruit jellies. Fruit. Ice cream. Cakes. Milk coffee. Milk tea. Egg nogg.

*Lunch, 9:30 P.M.*—Hot milk. Beef tea. Meat broth.

—*Four. Am. Med. Assoc.*, July 23, 1892.

**Coromilas on Inhalations of Carbon Sulphide in Phthisis.**—The author uses the remedy as follows :

	grms.
B Sulphide of carbon.....	15.00.
Calcium phosphate.....	10.00.
Water.....	100.00.

Every ten days or so the amount of the carbon compound should be increased by 5 grammes, never exceeding 30 grammes under any circumstances. He reports 73 cases so treated ; of these a cure is claimed in 58. He adds the following precautions : 1. The inhaling apparatus should never contain more than two hundred grammes of water. 2. In winter, especially in cold climates, the apparatus should be well covered with thick cloths, in order to facilitate the evaporation of the carbon sulphide ; for the same reason the temperature of the room where the inhalations are to be taken should be constantly kept at 20° or 25° C. 3. Before each inhalation the mixture in the apparatus should be well stirred. 4. At the beginning of the treat-



ment, the patient should take from three to four long and deep inhalations, repeated every three or four hours, and later oftener,—that is, every two or three hours. 5. The mixture should be renewed every eight or ten days. 6. If the patient, during the inhalations, be taken with hæmoptysis, as he has observed in two cases, the treatment should be absolutely suspended until this trouble has entirely ceased.—*Four. de Méd. de Par.*, April 17, 1892.

**Johnson (W.W.) on Rectal Treatment of Dysentery.**—Antiseptic irrigation is the key-note of the whole matter. The strong arguments for the superior advantages of antiseptic irrigation are found in the complete and successful manner in which it answers to the pathological conditions of dysentery: an intense inflammation, seated in the rectum, sigmoid flexure, and colon, and always more intense here, even when the disease extends higher up, characterized by gangrenous destruction of tissues and ulceration with decomposition, and accompanied and most probably due to bacterial multiplication. As a result of the pathological conditions here and the physiology of defecation the rectum becomes like an acutely inflamed bladder. A certain quantity of its contents is expelled; a residuum is always left; in some cases the amount is small, in others—bad cases with much fluid—it is large. The rectum is never emptied, but always contains some fluid in a state of active decomposition. In this condition, as in a distended bladder full of decomposing urine, the first indication is to empty the rectum, and the second to wash out the cavity and to keep it empty and clean.

All that is needed, then for this operation are a fountain or Davidson syringe, attached to a small rubber tube or large silk catheter, an escape tube of large size of soft rubber, made long enough by the attachment of a long piece of tubing, so that the fluid escapes into a vessel on the floor. The hand holds and guides the tubes and changes their position from time to time.

If the stools are small and contain blood and mucus, mere washing out of the rectum may suffice. If the patient continues to have fever, delirium, great restlessness, or other symptoms of general infection, or if stools are large, thin, with gangrenous odor, containing blood, mucus, and tissue-like shreds, then the attempt should be

made to make the tube pass in the sigmoid for higher injection. At first the bowel should be washed out every three hours. Then three times a day. *Keep the rectum empty and clean.* Use water enough to have the fluid return clear. Boric and carbolic acid solutions give perfect satisfaction.—*Am. Jour. Med. Sci.*, Aug. 1, 1892.

**Latta (M. M.) on Treatment of Diphtheria with Arsenite of Copper.**

—The first of October, 1891, an epidemic of moderate severity made its appearance in my city, and lasted for several months. My cases varying in age from one to ten years, were put upon the arsenite treatment, supplemented by small doses of calomel, when it was needed on account of constipation. Inunction, with sulphate of quinine suspended in glycerine, was practised in all cases, usually repeated every four hours. How much quinine was absorbed I do not know, but the plan keeps the skin in good condition. Where there was much cough or hoarseness, equal parts of glycerine and any good wine were given with arsenite. Or if that was not agreeable, one per cent. of benzoic acid, combined with powdered sugar, was dropped on the tongue, and repeated as often as thought necessary. No local applications were made; the surroundings were looked after, and when (as happened in some of the cases) little food could be taken, an effort was made to induce them to take water freely, either plain or in the form of lemonade. None of these cases were malignant, none died, and none suffered from unpleasant sequelæ. Such a short experience in the treatment of such a disease ought not to count for much, but I feel certain that the plan will prove (to say the least) as successful as any, while its application will be much more agreeable to all concerned.—*Indiana Med. Jour.*, July, 1892.

**Coronedi (G.) on Bromide of Strontium in the Treatment of Vomiting.**

—C. uses the remedy in the following manner:

R. Strontii bromidi purissimi gr. xv.

Supply in a well-corked glass tube.

Sig.: To be taken as a dose in wafer paper immediately before meals.

He reports two cases occupying his own practice and that of professional associates. He claims that the remedy acts as an excellent analgesic in gastric affections.

The mechanism of this action is doubtless the same as that of the other bromides: in the first place it diminishes the excitability of the nerve-centres, then that of the peripheral terminations of the gastric nerves; in this way it checks the completion of that reflex action *per excellence*, the act of vomiting. It is an ascertained fact that this general effect is due to the bromide present, and not to the base; but a short calculation shows that among the bromides in use, the strontium salt contains the least percentage of bromide ( $\text{KBr}=63.3$  per cent.,  $\text{NaBr}=77.6$ ,  $\text{Sr Br}=64.73$ ). If notwithstanding, the strontium salt shows, itself a more potent, more prompt, and more certain sedative than the others, we may well question whether in this instance some share of its action in vomiting is not due to the strontium. Considering that this bromide is, on the one hand, more active than on the others, and that it does not, on the other hand, produce the untoward neuro-muscular effects of the potassium salt, for example, there is something to be said for this possibility.—*Practitioner*, July, 1892.

**Turner (D.) on the Electrical Resistance of the Urine as an Aid to Diagnosis.**—The measurements were made by means of a Whetstone's bridge, with alternating currents and a telephone, and at a temperature of  $65^{\circ}\text{F}$ . It would appear from the observations—some 500 in number—that the specific resistance of a normal urine amounts on the average to about 45 ohms, and that it varies as a rule more or less inversely with the specific gravity. When the specific gravity is high and when the urine holds in solution much salts, its electrical resistance is low, and *vice versa*, where the specific gravity is low the resistance is high. The amount of urea has but little to do with the resistance

in ordinary urines. A number of experiments were made with artificial urines, and from these it is clearly apparent that the electrical resistance depends almost wholly upon the salts, and that it is only when these are quite absent, or very much diminished, that the influence of the urea makes itself felt. The resistance is a measure of the chemically active substances in the urine—of the salts, particularly of the chloride of sodium. This gives us a simple and rapid method of estimating the constitution of a urine as regards its salts, while the specific gravity, in the absence of sugar, is a guide to its urea. Some interesting and useful results come from the employment of this method. There are in certain diseased conditions exceptions to the rule laid down that "the resistance varies inversely with the specific gravity"; amongst these are croupous pneumonia and diabetes mellitus. The increased resistance in the former is due to the diminution in the chlorides, and in the latter to the great relative diminution in all the salts, while the specific gravity is raised above the normal by the sugar; but the very presence also of the sugar, if in large quantities, tends by its viscosity, perhaps, to slightly raise the resistance.

In acute and chronic Bright's disease, in certain respiratory affections, in pernicious and other anæmias, etc., the resistance is high; in neurotic individuals of active mental capacity, and in certain other conditions, the resistance is low. The method may be used in both diagnosis and prognosis, and has appeared to me to be an excellent barometer not merely of the efficacy of a patient's kidneys, but also of his general condition. The lower the electrical resistance the healthier, *ceteris paribus*, will be the condition of the kidneys; and where a patient is improving the resistance will diminish from day to day and *vice versa*.—*London Lancet*, July 16, 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

BY A. H. TRAVIS, M.D.

**Thacher (J. S.) on the Diagnosis of Pancreatic Disease.**—While proteids, starch, or fat may be present in the fæces in cases of pancreatic disease, and their presence in abundance is a factor in the diagnosis, they usually are not present, and their absence does not indicate a normal

condition of the pancreas. The presence of fat points more strongly to disease of the liver or its ducts. A possible diagnostic point, the diminished ratio of the fatty acids to the neutral fats, loses its practical value because of the elaborate quantitative tests required. The absence or diminution

of indican in the urine and lipuria are of no diagnostic value. Experimental and pathological observations show a casual relation between pancreatic disease and diabetes; and diabetes seems to have diagnostic value pointing rather toward chronic pancreatitis, lithiasis, cirrhosis, degeneration and steatosis, than to tumors or acute lesions. Pain, often colicky or neuralgic, is generally present in acute lesions. Jaundice is frequently produced by cancer of the pancreas. It is rarely produced by cysts, and not at all by other pancreatic lesions. Ascites and enlargement of the spleen are often caused by a pressure of a cancer on the portal vein. Occasionally the abdominal aorta is compressed by a pancreatic tumor. There may be symptoms of indigestion. Mental dulness and depression are common. In acute cases, in addition to the pain, there are apt to be vomiting and collapse, sometimes fever. Physical examination for pancreatic cancer has failed to find it in about half the cases. When found it is in the epigastrium at the mid-line or a little to the right of it, and is, as a rule, very slightly or not at all moveable.—*N. Y. Med. Jour.*, April 2, 1892.

**Von Jaksch (R.) on the Diagnostic Value of Hydrochloric Acid in Gastric Juice.**—Few observations exist concerning the quantities of hydrochloric acid normally secreted in health during digestion. The quantity of hydrochloric acid secreted during digestion is very variable, depending on the character of the food. The secretion is more rapid after meat food than after milk, and most tardy after carbohydrates. It is, therefore, necessary to ascertain at what time the food was taken by the patient and the kind of food ingested by him, when the quantity of hydrochloric acid present is to be made use of for diagnostic purposes.

The absence of free hydrochloric acid or the presence of mere traces from one quarter to one half hour after the ingestion of food is without pathological significance. A grave disturbance of the gastric function however, exists when no hydrochloric acid is found from one to three hours after the administration of meat or milk. Large quantities of hydrochloric acid, even up to 0.33 per cent., found three hours after the ingestion of meat or milk do not justify the conclusion of the existence of hypersecretion.

All these points have to be well consid-

ered when judging of the diagnostic value of the qualitative tests. It further follows that only those methods are admissible for scientific purposes which actually show those quantities of hydrochloric acid which are physiologically active. None of the color reactions answer these requirements; they, however, possess unquestionable value as approximate tests for the practising physician and for hospitals, because they can be applied rapidly. Physiologically active hydrochloric acid is that which already has done its work and has combined with proteid bodies, or which is yet for disposal—that is, really free.

In kidney diseases a considerable diminution in the secretion of hydrochloric acid has been observed by Biernacki and by the author. In acute and chronic dyspepsias free hydrochloric acid was very frequently totally absent, in chlorosis it was absent in forty-five per cent. of the cases, and in ulcer of the stomach the proportion was variable. (Lenhartz.) The absence or presence of free hydrochloric acid is a symptom which admits of a great many explanations, and which can only be used diagnostically if all collateral points are carefully considered.—*Trans. Internat. Med. Mag.*, March, 1892.

**Johnston (W. W.) on Forms of Disease Characterized by Indigestion, the Presence of Bile, Urates, and Uric Acid in the Urine, and by Nervous Symptoms.**—The author draws attention to a large group of patients who give histories that are more or less alike in their essential features, although the complaint for which relief is sought may be very different in different cases. The most marked symptom may be distress after taking food, or obstinate constipation, or loss of flesh and color, or any one of a large number of symptoms of functional disorder of the nervous system, simple headache, or vertigo, inability to perform mental labor, irritability of temper, hypochondriasis, perversions of sensation, urticaria, etc. The urine is rarely normal. The urates and uric acid are in excess and there may be bile.

These cases may be divided into two classes, both having associated digestinal and nervous symptom, but in one the nervous, and the other the gastro-intestinal and hepatic disorder is more prominent. It is not difficult to recognize the symptoms and to associate them with the organs with

which they are connected, but it is not easy to give a name to the affection, or to decide as to the seat of the primary disorder. Two theories are suggested in explanation of the mode of origin of the symptoms. According to the first, the earliest etiological influence was in irregular habits of eating, hurried meals and imperfect mastication; these made gastric digestion less perfect. Incompleted gastric digestion always involves fermentation; hence the duodenum is made to receive a mass containing much unaltered or partly altered nitrogenous matter, along with starches and fats, the whole in a state of fermentation, and bacterial multiplication. Sooner or later the time comes when the digestion of fats, starches, and albuminoid matters in the intestines is delayed or incomplete; decomposition must follow, with resulting formation of organic alkaloids. The liver function is deranged, for bile and urates in excess appear in the urine. These conditions are sufficient to explain many of the dyspeptic symptoms and disturbances of nutrition. The disturbances in the nervous system are explained in the following manner. The multiplication of micro-organisms which exist in great numbers in the normal intestine is attended by decomposition in the intestine and by the development of toxic products which, in health, do no harm, as they are eliminated in the stools and the urine, or are all destroyed in the liver. But when digestive activity is delayed and constipation diminishes elimination, a greater amount of toxic materials is produced and absorbed. Disturbance of hepatic function preventing the destruction of these products, their entrance into the general circulation causes reactions everywhere, but particularly in the nervous system.

The second theory is, that the original cause is in a fatigued or overstrained nervous system; that a disordered nervous apparatus does not regulate the functions of the body, and that through the disturbed vasomotor and sympathetic functions the digestive secretions are deficient or altered in quality; hence result indigestion, intestinal catarrh, and all the symptoms of innutrition. It is primarily, according to this view, a neurasthenia.

The difference between the two theories is more apparent than real, and both may be true. Whichever theory is adopted, the plan of treatment involves a restoration

of the altered functions of the digestive and nervous systems by improved blood supply, and improved nutrition of the tissues. The patient's confidence must first be won, surroundings must be made congenial, overstrain of digestion and the nervous system must be avoided. Diet must be adapted to the patient's age, habits as to exercise, mental work, and digestive activities. It should consist of the lighter and more digestible forms of albuminoid food. Beef, mutton, and eggs should be avoided, and fresh or salt fish, oysters, sweetbreads, the white meat of chicken, etc., are advisable. The vegetables which contain the least amount of starch are the best. All farinaceous foods are bad. Fruits are agreeable and not harmful. Milk is a typical food with some, with others it never agrees. If taken, it should not be used at the regular meals, as it is then apt to be taken in larger than necessary quantity and digestion is delayed—besides milk easily undergoes fermentation. As a substitute for other food it is valuable. Alcohol in any shape or form is injurious. Tea and coffee delay stomach digestion, but have no effect on pancreatic digestion. Hence a little coffee or weak tea may be allowed. The effervescent table-waters rather aid than delay digestion. The various aids to digestion often fail to secure positive results, yet they should be given. Roberts has suggested a plan to meet the objection that pancreatin given after a meal is destroyed by the acid of the gastric juice during even a short stay in the stomach; his method is to add pancreatic extract to food fifteen or twenty minutes before it is eaten. Pepsin and dilute hydrochloric acid are always useful resources in feeble gastric digestion. All this treatment is intended to prevent decomposition and development of toxic agents in the intestines; but for some time, at least, the evil will continue, and means must be used to render those products harmless, and to eliminate them. Theoretically, disinfection is to be obtained by means of thymol, salol, naphthol, salicylate of bismuth, etc., the drug to be given before eating, but not within one hour and a half after. Daily evacuation of the colon should be obtained. Cathartics are the last remedies to be advised; hydragogue cathartics are wrong in every way. Proper diet, exercise, and colon massage may accomplish the end. If not a small water enema,

mild laxation pill, or electricity, may be employed.

When toxic products have entered the system, their elimination is favored by diaphoresis, diuresis, and inhalation of compressed air or oxygen.

As regards other drugs, tonics are bad; iron is the worst. Bitter tonics are inadvisable. Cod liver oil is objectionable.—*Med. News*, March 12, 1892.

#### Kober on Sulphonal Poisoning.—

The case, a woman fifty-two years old, was observed by the writer in January, 1891. Afflicted with increasing deafness associated with tinnitus and consequent sleeplessness, she had become melancholic and refused to take sufficient nourishment. Tonic and roborant treatment were adopted, with the use of bromides and sulphonal to diminish the tinnitus and produce sleep. Fifteen to forty-five grains of sulphonal were given daily: the largest dose being seldom given. The use of the drug was continued four or five weeks. After a short period of improvement, she was attacked with nausea and frequent vomiting. These symptoms continued several days and were accompanied by severe cutting pains in the umbilical region. There was obstinate constipation. The abdomen was not distended. The patient complained much of thirst. There was no fever and the frequency of the pulse was but slightly increased. The patient was apathetic. The urine was diminished in quantity—less than one liter daily; its color at first "burgundy-red" became darker; it contained no sugar, and at first no albumen and no formed elements—sp. gr. 1.021. The coloring matter in the urine was examined, and although its reactions did not altogether correspond with those of hæmoglobin, it was clearly shown to be closely related to that substance. It was supposed that the hæmoglobin was connected with the continued use of sulphonal. The use of sulphonal was immediately stopped. Nevertheless the urine became darker, contained albumen and large numbers of leucocytes, and granular and epithelial casts partly stained with red-brown pigment appeared. No red blood-cells were present. The quantity of urine diminished to 500 ccm daily; and retention of the urine set in. The patient's sufferings increased, she rapidly lost strength and died three weeks after the discovery of the hæmoglobinuria.

The writer is convinced that the cause

of this nephritis is to be found in the continued irritation of the kidney tissue by the secretion of hæmoglobin and that the hæmoglobinuria was dependent upon sulphonal intoxication. Sulphonal could not be found in the urine. There was, however, an increase in the sulphates.—*Centralblatt f. klin. Med.*, No. 10, 1892.

#### Sobernheim (G.) on Hæmatoporphyrinuria.—

But few observations of this phenomenon have been made. The chemical properties of hæmatoporphyrin, an iron-free hæmatin, are not well understood, but it possesses a certain clinical interest as it has been found several times in urine of a markedly red-brown color. The author reports a case occurring in a boy thirteen years old. He was received into the hospital on the fifth day of a light attack of typhoid fever, which presented nothing unusual in its course, and his urine was then noticeably dark purple-red in color. During the following days the urine became dark brown red and almost opaque; after a day or two it became gradually lighter. There were no albumen or biliary coloring matters present, and no red blood-cells or other formed elements could be found. By chemical and spectroscopic examination of the coloring matter and reduction products, it was shown to be hæmatoporphyrin. The case is especially interesting in regard to ætiology. In all the recorded cases (so far as examined) the previous use of sulphonal was noted and the affection was supposed to be a phenomenon of intoxication. In this case neither sulphonal nor any other drug had been administered. In the beginning of the disease a tumor in the abdominal wall was observed and regarded as a hæmatoma of the rectus muscle. The supposition that there was a connection between the hæmatoporphyrinuria and the hæmatoma was supported by the nearly simultaneous increase and diminution in the size of the tumor and the quantity of hæmatoporphyrin in the urine. The hæmatoporphyrin continued several weeks in the urine, and as there was no accompanying disturbance of the general health, the substance probably possesses no injurious qualities. The severe course of a large proportion of the cases of sulphonal poisoning may be regarded as the result of general intoxication with the drug, and the hæmatoporphyrinuria simply as an accompanying symptom.—*Deutsch. Med. Wochens.*, June 16, 1892.

**Stickler (W.) on a Case of Carcinoma of Kidney.**—The patient, male, æt. forty-five, had a severe attack of malarial fever, after recovering from which he observed a tumor in the right side of the abdomen. It was regarded as an enlarged liver. Had no pains or jaundice. Appetite was good and bowels regular, but he lost weight. Emaciation became more and more marked. In June, 1890, there was dulness from the nipple to a point two inches below the umbilicus. The tumor was hard to the touch and irregularly nodular. In November, 1891, a small area of fluctuation was appreciated in the axillary line. Some fluid which was aspirated consisted of pus and blood-cells, with a few cells which had the appearance of cancer-cells. Urine gave no evidence of renal disease. The patient continued to lose flesh and strength. Death occurred in January, 1892. Lower extremities were very œdematous. Circumference of abdomen three inches below umbilicus 47½ inches. A tumor, lobulated, kidney-shaped, weighing 43 pounds occupied the abdominal cavity. Within the interior of the growth was a cavity about the size of a fig, caused by an ulcerative process. The tumor was adherent to the liver, intestines, and omentum. Otherwise the abdominal viscera were normal.—*New York Med. Rec.*, April 23, 1892.

**Oliver (T.) on Hemorrhagic Nephritis, or Blood-Tumor of Kidney.**—A woman, aged twenty-three, complained of pain in both sides of chest of one month's duration, and of a swelling in the upper part of the right chest, which she had noticed only two or three days previously. The only illness remembered was small-pox in childhood. The pain appeared suddenly and was constant. She was pale, not emaciated. Temperature 101°. Between first and second costal cartilages there is a rounded tumor the size of half a billiard ball, pulsating synchronously with carotid artery, slightly expansile and dull on percussion. No bruit. Urine 1.012, containing albumen and casts. Tumor lost its pulsatile character, became hard and painful, and surface became red. It then diminished in size, and fluctuation was detected. Epistaxis occurred. Pericarditis appeared with præcordial pain and intense dyspnoea. Hypodermic withdrew pus and blood from tumor. Patient began to improve. A fortnight

later sudden pain was felt in right side of abdomen. A large swelling had appeared suddenly in region of right kidney. Constant vomiting. Hæmaturia appeared, lasting a week. Needle withdrew dark, thick blood. Tumor varied in consistence from day to day. Temperature oscillated, frequently reaching 103°. Pericardial friction with dyspnoea and pain appearing and disappearing. Recurrent epistaxis. Œdema of extremities. Paralysis of flexors of right fingers with anæsthesia over area supplied by median nerve appeared. Urine diminished, albumen increased. Patient died comatose.

Necropsy. No tumor in chest wall; no cyst-cavity, but a localized accumulation of connective tissue. Pericarditis. Bronchial glands cheesy. A tumor size of a cocoa-nut in right lumbar region found to be degenerated right kidney, nearly the whole of the tumor being composed of blood lying loosely or in small loculi; little kidney tissue remaining. Left kidney contracted and granular. Liver nutmeggy. Chronic diffuse nephritis of the kidney tissue remaining in the tumor and forming the lining of the blood-cyst.—*British Med. Jour.*, March 26, 1892.

**Auld (A. G.) on the Pia Mater in Bright's Disease.**—From examinations of patients dying from Bright's disease conducted during the past eighteen months the author concludes: (1.) The hyaline-fibroid thickening of the outer coat of the vessels is not of the nature of an exudation or deposition of a foreign substance, nor yet a transformation of existing structures. (2.) The effect of re-agents is unimportant. (3.) The thickening of the outer coat is unquestionably due to proliferation of connective-tissue corpuscles embedded therein, leading to new formation of tissue; in short, is a slowly-progressing periarteritis. (4.) This change is probably general throughout the entire tissue of the pia mater. (5.) The muscular and inner layers of the vessels show hyperplastic changes at first; latterly atrophic and degenerative changes set in.

In the case of the smaller arterioles, their muscular elements were certainly increased in volume, if not also in number, and their delicate investment of connective tissue was represented by a thick, homogeneous-looking cylinder. It is to be particularly noted, however, that their endothelial lining showed no deviation from the

normal, in this respect presenting a marked contrast to the condition prevailing in the larger vessels. The diameter of the channels in these thickened arterioles suffered great diminution; not infrequently it measured just the diameter of the wall. Such a diminution suggests an adequate explanation of the cardiac hypertrophy in chronic Bright's disease.—*Lancet*, May 7, 1892.

**Woodhead (G. C.) on the Ætiology of Cancer.**—Conditions predisposing to the formation of cancerous tumors may be found in the tissues of old age. The connective tissues have passed their prime. The epithelial tissues have also reached the height of functional activity and are now on the decline; but they have still sufficient vitality, when diverted from the imperfect functional to a vegetative activity, to give rise to large masses of imperfectly developed epithelial cells, which appear to have the power of invading the connective tissue. Examinations of the tongues of old persons show an appearance quite different from what is seen in the tongue of an infant. The subepithelial tissue is considerably atrophied. The epithelial covering, on the other hand, has assumed a very different appearance. The masses of cells are more or less ramified, small finger-like processes pass into the connective-tissue spaces, until in some cases we might imagine that we were examining an epithelioma. As this condition appears to be normally present in the tongues of most old people, it is easy to understand how some slight but long-continued irritation may give rise to an epithelioma. Similar processes have been remarked in the involution of the breast.

Besides these predisposing conditions there is necessary for the development of cancer an exciting agent which must act continuously in the sense that it has the power not only of persisting, but of increasing in quantity and activity. It must also have, under certain conditions, the power of acting almost specifically on epithelial cells, and of setting up proliferation in them at the expense of their functional power. There have long been known a number of parasites most of which affect epithelial cells, which exhibit little motion, are more or less homogeneous in structure, but which are surrounded by a hard, smooth cuticle. Organisms of this class have been described as occurring in the liver of rabbits (under the name "coccidium") and in

epithelial cells lining the intestine of various animals (and even in man), where they set up proliferative changes—psorosperm nodules—similar macroscopically and histologically to cancerous growths. The so-called fuchsin bodies of Russell present in cancerous tissue have all the characters of coccidia, and appear to bear a casual relation to the growth of cancer. In a section of a rapidly growing secondary cancer in which these bodies are present, the proliferation of the epithelium is always most marked where the encapsuled bodies are most numerous. We are still very far from the proof that these organisms are the actual cause of cancer. Why should they make themselves felt only under certain conditions and at certain periods of life? The healthy, dry epithelial tissues resist the attacks of even the most vigorous parasite; when, however, their functional activity is impaired or their vitality somewhat lowered, the coccidia may find a nidus in which they develop, secrete the products of their protoplasm, and so act on the epithelial cells, giving rise to proliferation and by their irritation bringing them back to their embryonic form. These same products of metabolism must irritate the connective tissue in the immediate neighborhood, and so give rise to granulation tissue, which more readily allows invasion of the proliferating epithelial cells. These secretions may also play an important part in the cachexia of cancer.

It is not strange that inoculative experiments have not been successful. The cancerous masses which were introduced were absorbed by the new connective tissue which formed around them, and the coccidia, which, under the most favorable conditions for their growth and development, appear to be able to continue their existence only when protected from the connective tissue by the proliferating epithelium in which they are lodged, were eventually absorbed.—*Med. Press*, May 11, 1892.

**Opitz (W.) on Bradycardia.**—O. reports a case of bradycardia as showing that in some instances marked slowness of heart-action is not to be considered pathological. A strong, healthy, middle-aged workman had an attack of pneumonia. The rate of the heart-action during the height of the illness was but 60, and with commencing convalescence it fell to 40. A fortnight after his illness the man returned

to hard work without an increase in the rapidity of heart-action.

In a second case the most careful examination failed to show any cause for the slow heart-action, other than the extreme weakness of the patient. The patient was a well-nourished woman, seventy-three years old. Her heart-action during three months was 28 to 30 to the minute. She had occasional attacks of weakness in connection with a gastro-intestinal catarrh, and during them the number of cardiac contractions, as ascertained by the stethoscope, fell to 24 and 20. With this low rate the pulse-wave was full and strong, but the patient complained of dizziness and headache. The area of cardiac dulness was not increased, the heart sounds were clear. Without any essential change in her general condition, the heart rate gradually rose, and four months later was 80 to the minute.—*Centralblatt f. klin. Med.*, No. 8, 1892.

**Romberg (E.) on the Lesions of the Myocardium in Typhoid Fever, Scarletina and Diphtheria.**—R. reports in the *Deutsches Archiv. f. klin. Med.*, Bd. xlviii., Heft. 3 u. 4, the microscopic appearance of changes in the heart muscle, visible macroscopically as cloudiness, fatty degeneration, or anæmia, in 11 cases of typhoid fever, 10 cases of scarlatina, and 8 of diphtheria. In addition to the already recognized parenchymatous degenerations, and independent of them, there were interstitial changes indicating an infectious interstitial myocarditis, beginning acutely, but resembling anatomically a chronic inflammation. This interstitial inflammation occurred in all the cases of diphtheria, in almost all of those of scarlatina, and in most of those of typhoid fever. In half of the diphtheria and typhoid cases there was perineuritis of the pericardial nerves. This was not observed in the cases of scarlatina. Apparently temperature has little etiological influence.—Abstracted in *Centralblatt f. klin. Med.*, March 19, 1892.

**Fyfe (W. J.) on a Recent Outbreak of Rötheln.**—During an epidemic of rötheln in the Clifton College, 91 boys were attacked, the majority of whom exhibited the ordinary form of the disease. In eight cases a primary rash, having the characters of the simple pink mottled eruption of rötheln, was followed by a secondary rash at a period of two to six

days after the first, so like that of scarlatina as scarcely to be distinguished from it. Five cases presented the scarlet rash from the beginning. In some of these cases marked desquamation followed the eruption. The diagnosis was difficult in some of the cases. It was based on the absence of scarlatina from the neighborhood, on the want of proportion between the intensity of the rash and the general condition of the patients, the mildness of the throat symptoms, the absence of glandular and kidney complications. The eruption was bright scarlet, but it had more of the uniform velvety look of erythema than the punctate rash of scarlatina.—*Bristol Med. Chirurg. Jour.*, March, 1892.

**Combemale on Disorders of Speech in Variola.**—In *Arch. Gén. de Med.*, June, 1892, Combemale draws attention to the paralytic phenomena that may occur in the acute infectious diseases. In variola speech disorders have been but rarely recorded, and the author has been able to collect but ten such instances. The case of a girl, aged twenty, is reported. During the attack of smallpox the temperature was very high and the delirium marked. On the twelfth day a certain slowness in the speech was noted; the voice was somewhat nasal in character, and there was a slight apparently fleeting internal strabismus. The uvula deviated to the left and was insensitive. There was much difficulty in elaborating answers to questions. On the twenty-fifth day the difficulty in speech persisted, and the left upper eyelid drooped a little. The labials and dentals were badly pronounced. In two months there was considerable improvement. Combemale thinks that in some cases the affection is of the nature of a paralysis, in others it is ataxic in character. The paralytic affection of speech, he thinks, is common, but the verbal ataxy rare. The latter is due to a persistent lesion in the nervous centres, such as minute hemorrhages, but the paralysis he regards as due to the effects of toxines upon the peripheral nerves. If it is accepted that a membrane on the palate is a necessary condition for a subsequent paralysis of the palate in diphtheria, so it may be taken that the eruption on the palate is necessary to the development of speech defects in variola. The author has noticed that many patients speak with a nasal twang during convalescence from variola.—Ab-



stract in *Brit. Med. Four. Epitome*, June 25, 1892.

**Kennedy (J.) on Cardiac Thrombosis.**—The patient, a woman about twenty years of age, had complained of severe headache for about ten days. No other symptom could be elicited. She had previously enjoyed perfect health. She was delirious; the delirium, at first of an active type, passing into coma. Pupils were dilated, skin was cold, and the pulse feeble and indistinct. Breathing appeared natural, but the chest was not auscultated. Gummy material was vomited. Death occurred in a few hours. The brain was found to be pale and bloodless, but no other lesion could be discovered. Firm, pale, elastic clots adherent to the columnæ carneæ were found in each ventricle of the heart. A yellow, softer thrombus filled the ascending and transverse aorta. The author explains the symptoms by anæmia of the brain produced by interference of the circulation due to the thrombus.—*N. Y. Med. Record*, April 9, 1892.

**Duckworth (D.) on Abarticular Rheumatism Accompanied by Endocarditis and Subcutaneous Nodules.**

—The patient, a girl, seven years old, was admitted to hospital November 17th suffering from dyspnœa and weakness. She had suffered four months previously from pains in the knees and legs, and afterwards became short of breath. The latter trouble had increased of late, especially at night. There was no history of scarlatina, chorea, sore throats, or "growing pains," and there was no family history of rheumatism. She was pallid, but fairly nourished. Respiration was 55; pulse, 140, and of low tension. The heart was enlarged, and there was a double murmur at the apex. Over the lungs a few dry rhoncal and sibilant sounds were audible. Some hard nodules were found about the patellæ and on the elbows. On the 25th sore-throat was complained of, and the fauces and tonsils were covered in part with a suspiciously diphtheritic-looking exudation. The temperature did not rise above 100.8°; the pulse became very feeble; dyspnœa increased. A few days later vomiting and diarrhœa set in. A doubtful pericardial friction sound was heard. The throat symptoms gradually disappeared, but uneasiness and distress were manifested. Osthonpœa increased, and legs became œdematous. The cardiac conditions underwent little change. Death

took place December 12th. The author is not convinced that the sore throat was of a specified diphtherial nature. Autopsy showed recent pericarditis, fatty degeneration of cardiac muscle, and endocarditis. Nodules removed from the integument in the neighborhood of the knee and elbow-joints consisted of inflamed fibrous tissue. The point of chief interest in this case is the occurrence of grave cardiac disease associated with subcutaneous nodules and the absence of ordinary articular rheumatic manifestations. A sufficient number of cases of this kind has been reported to show that the several phenomena are distinctly of rheumatic nature. A study of the abarticular phases is necessary in order to form a true conception of the nature of the malady. The underlying element common to the nodules, pericarditis, and endocarditis is unquestionably true rheumatism. The presence of nodules in the skin should lead to a careful examination of the heart. The treatment is that proper for the treatment of rheumatism generally. Sodium salicylate is inadvisable. Quinine, strychnine, potassium iodide, and the alkalies are useful. Arsenic is of especial value, and should be used persistently. The prognosis, however, is not good.—*Practitioner*, March, 1892.

**A Method of Duodecimal Posology.**

—The introduction of alkaloids and highly dangerous vegetable and mineral substances into modern therapeutics is a source of numerous mistakes and fatal accidents. The degree of toxicity of these substances is so variable that even the physician with the most thorough training and reliable memory must frequently be in danger of prescribing either inefficacious or dangerous doses. In a *mémoire* submitted to the Académie de Médecine, M. E. Trouette, a pharmaceutical chemist, proposes to avoid this danger by a method of duodecimal dosage, which he summarizes in eight propositions:

1. The duodecimal method is especially applicable to alkaloids and dangerous medicaments. 2. Using this method errors and poisoning are impossible. 3. The "method" consists in dividing the maximum quantity of a medicament which may be given to an adult in the twenty-four hours into twelve pharmaceutical doses; granules, pillules, dragées, wafers, capsules, pastilles, etc. 4. Each dose represents the twelfth part of the maximum daily quan-

tity. 5. Twelve doses may therefore be exhibited in the twenty-four hours without danger; for instance, one wafer every two hours, or two wafers every four hours, etc. 6. In certain urgent cases the twelve "doses" may be given at a single time or during a short interval, according to the physician's judgment. 7. The division of the maximum daily dose by twelve should always be adopted, whatever the degree of toxicity of the drug. 8. The figure 12 represents the maximum dose for the adult, but this dose varies according to the age, sex, susceptibility, and tolerance of the patient, period of the illness, etc.—*Journal d'Hygiène*, Feb. 18, 1892.

**Bolton (M.) on a Pus-Producing Bacillus Obtained from Earth.**—While endeavoring to get out a culture of tetanus-bacilli by Kitasato's method from garden earth, the author found a bacillus which causes abscesses promptly at the seat of inoculation in various animals. A rat inoculated with garden earth died within forty-eight hours of tetanus. Another rat was inoculated with a culture obtained

from the wound, and an abscess formed at the seat of inoculation, but the animal had no symptoms of tetanus. From the pus of this abscess pure cultures of the pus-producing organism were finally obtained. The organism which Dr. Bolton names bacillus pyogenes soli is about the size of the bacillus of diphtheria, and resembles the latter closely in appearance, presenting the same irregularities of shape and the transverse unstained clear spaces in stained preparations. The individual bacilli vary in length, thickness, and shape. A very slightly acid medium seems to be most favorable to their growth. Subcutaneous inoculations of small, or even large, amounts produce an abscess confined strictly to the seat of inoculation. The abscesses form quickly within twenty-four hours, and run a longer or shorter course, from forty-eight hours to ten days in direct proportion to amount of culture introduced. Injections into the veins produce in some cases metastatic abscesses, especially in the joints and kidneys.—*Am. Jour. Med. Science*, June, 1892.

## FURTHER REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

### Coplin (W. M.) and Bevan (D.) on a Test Reaction for the Culture of the Micrococcus Pyogenes Aureus.

—We have discovered, quite accidentally, that if culture media be made after the following formula, a very definite reaction takes place when inoculated with the micrococcus (staphylococcus) pyogenes aureus. The culture-medium which we have been using in the laboratory for a considerable time in the cultivation of micro-organisms is made as follows:

B.	Meat extract.....	5 grms.
	Peptone, dry (albumen)....	10 grms.
	Glycerine.....	62 grms.
	Water.....	1 litre.

To this add agar 1.5 per cent.

Methods for filtering and clearing are the same as in the preparation of other forms of culture-media.

If upon this medium a scratch-culture be made from a growth of the micrococcus pyogenes aureus, it will be found that on the second day after the inoculation the growth of the organism will be manifest; that on the third or fourth day the substratum will begin to become opaque, and

by the end of the fifth or sixth day the entire mass of culture-medium will assume very much the appearance of having tapioca intermixed with it. It will be an opaque, white, uniform almost throughout the entire medium, except that it will be most dense near the surface, with diminished density as we proceed toward the bottom of the tube. It can readily be proven, by lateral cultures and by cover-glass stains, that the change in appearance is not due to the development of the micro-organism in the deeper layers, but results from some chemical alterations induced, probably, by the microbic alkaloid. So far as we have been able to observe, and we have used the medium for nearly all cultures, the change only takes place in the presence of the micrococcus (staphylococcus) pyogenes aureus and the micrococcus tetragomus, in the latter to a much less degree than in the former. The mixture of several organisms does not seem to change the character of the reaction, so that for the determination of a mixed culture this "pearly white reaction," as it may be called, will be found very significant.—*N. Y. Med. Record*, July 16, 1892.

**Crouch (M. J.) on Nutrition.**—The cart has been before the horse long enough—let us reverse the awkward position, and place them in a more practical way. Instead of teaching that an *abnormal nutrition* is the result of “*disease*,” let us teach that “*disease*” is the result of abnormal nutrition. Then, and not till then, will we make progress toward the goal of medical science.

The most important part of physiology is *nutrition*. The most important part of pathology is *nutrition*. Disease is not an entity, but the result of an abnormal or vicious nutrition. It is a process, differing from the normal processes only in *form* and *course*. All normal growths must be nourished, or they degenerate and die. So all morbid growths must be nourished, or they undergo like changes. What is the difference between the two conditions? Only a difference of nutrition. In the former it is according to natural laws, in the latter in violation of those same laws—it is vile.

When the nutrition is abnormal, the heat produced and functions performed by that body are abnormal, and as varied in results and as far-reaching as pathology. Thus inflammations, hyperplasias, hypertrophy, and different degenerations may be due to the same form of nutritive disturbance, the different results due to the different *course* pursued. The cause is the same, the results varying as the form and *course* vary. These varieties may become less numerous, as we become more familiar with the cause. You wish to know the nature of this cause? I told you that nutrition was at fault—*first*, last, and all the time. The causes of this faulty nutrition are predisposing and exciting. The predisposing causes would embrace all such as heredity and environment. Exciting causes would embrace all such as were irritating to the organism. Here the field broadens, and the eyes wander over unlimited space, bringing into view many strange things, difficult to see and to understand.—*Four. Am. Med. Assoc.*—July 30, 1892.

**The Proper Diet for Hot Weather.**—In an article in the *Gentleman's Magazine* which has been reproduced in the *Popular Science Monthly* for July, Dr. N. E. York Davies treats of the proper diet for hot weather.

“*Breakfast*, 8.30 to 9 A.M.—Two cups of tea or coffee sweetened with saccharine (?), one or two

teaspoonfuls of cream in each; one ounce dry toast thinly buttered; four ounces of grilled or broiled fish, such as plaice, sole, whiting, haddock, cod or trout, or four ounces of cold chicken, cold tongue, or of grilled steak or chop.

“*Lunch*, 1.30 P.M.—Two or three ounces of cold mutton, beef or lamb; three or four ounces of green vegetables, plainly boiled, plenty of green salad, made with vinegar, but without oil; four or five ounces of stewed fruit; water with two or three glasses of pure, dry Moselles or other Rhine wines.

“*Afternoon Tea*, 4.30, if desired.—Two cups of tea as at breakfast; nothing to eat.

“*Dinner*, 7 to 8.—Julienne, or clear vegetable soup; three or four ounces of fish; three or four ounces of any red meat, or of chicken, rabbit, game or venison; six ounces of any green vegetable with gravy from the meat only; four ounces of stewed or raw fruit; a little stale or pulled bread and a small piece of cheese.”

For an American the following suggestions are made by the editor of the *Boston M. and S. Journal*. He rises early, and wants his breakfast by 7 or 7.30 o'clock. For this very reason that he is an early riser, and that he goes to bed early (between 9 and 10 P.M.), he does not wish his principal meal to be in the evening instead of at noon. A hearty meal between 7 and 8 o'clock in the evening would be a physiological mistake for a man who is to go to bed at 9 or 10. On the other hand, the literary man, the student, the journalist, the member of a legislative body whose principal sessions are in the night-time, and all who are obliged by their special calling to retire late, need a hearty meal in the evening; and as their sleep must be largely after midnight, they will not be ready for their morning meal till about the time designated by Dr. Davies for the breakfast hour. The “typical American” takes an early breakfast, when he indulges freely in fruit, and never omits a first course of oatmeal and milk, cracked wheat or hominy; this is followed by dry toast, or buttered toast, an egg and a little cold meat or fresh fish, and a cup of coffee sweetened with sugar, not with saccharine, which is reserved for the diabetic. He would be glad of cream if it can be obtained. His dinner is the principal meal, and is always taken near the middle of the day. This is composed of soup, three or four ounces of broiled fish, roast meat, or fowl, four to six ounces of green vegetables (green peas, green beans, stewed turnips, onions, squash) four ounces of potatoes with meat gravy, with pickles and jelly *ad lib*. The last course, the apple, custard, or berry pie of our forefathers, doubtless does not deserve

all the abuse which has been heaped upon it by our English cousins, especially when it is light, without too much "shortening," and with a well-cooked bottom crust.

The last meal, the supper, is rather taken early (as soon as 6 o'clock) and is designed to be a plain, light, substantial meal of bread and butter or tea rolls, a little stewed fruit for relish and one or two cups of tea. The "average American" seldom eats lunch.—*Boston Med. and Surg. Jour.*, July 14, 1892.

**Cluness (W. R.) on the Effect of La Grippe on the Pneumogastric Nerves.**—In the course of an exhaustive article on this disease the writer says :

It appears probable that the pneumogastric nerve becomes affected early in all cases, for the organ supplied by it, the lungs, heart and stomach, are always more or less involved. In one case the cardiac, in another the pulmonary, in a third the gastric branches may be disturbed, while in a fourth any two of them or all combined may be affected. In a case which came under observation in consultation. Cheyne-Stokes respiration was present for several days, probably indicating involvement of the medulla. In several cases the frequency of the pulse was out of proportion to the temperature and respiration, doubtless owing to the expenditure of the grippal poison on the pneumogastric. Most probably the germ is taken into the system through the respiratory tract, where it comes in contact with the peripheral filaments of the nerve.—*Occident Med. Times*, July, 1892.

**Hollister (J. H.) on a Modified Form of Continued Fever following the Epidemic La Grippe.**—The cases were observed in Chicago. The writer had observed following the pandermic many cases of continued fever, which had been admitted to hospital classified as typhoid. He soon began to doubt the correctness of the diagnosis. A study of fifty cases had furnished the following data. No common cause could be assigned. Previous history was negative. Some had grippe but the majority not. The prodroma lasted four days with extreme muscular soreness. The onset was gradual, no chill being noticed but the fever was continuous without intermission. The average duration was twenty-three days. Relapses were common but could be attributed in many cases to dietetic errors.

There were no head symptoms or coma and no subsultus. In four cases there was profuse sweating lasting over ten days. The stomach was not troublesome. Secretions were all diminished but there were no cuticular discharges. The mouth was rarely dry, tongue not fissured and no sordes. The dorsum was milk white. There was no tympanites or abdominal tenderness : no peritonitis ; bowels bound up. In only three cases did the stools suggest typhoid. No bacteria were found in them.

The urine did not respond to Ehrlich's test, nor were any albumen sugar or casts found. There was no rash. Dr. Hollister did not believe the disease was typhoid. In treating the cases main reliance was placed on sponging and packs. Three cases died, one from pneumonia and two from exhaustion. No intestinal lesions were found at any of the autopsies.—*Four. Amer. Med. Assoc.*, July 23, 1892.

**Robinson (S. G.) on a Case of Influenza with Eruptions.**—The patient a laborer, aged nineteen, with good previous history, was taken sick seven days before admission with headache, severe pains in the calves of the legs, slight chilly sensations, fever, slight cough, marked muscular weakness and loss of appetite, two days after which an eruption appeared which even when first noticed was universal.

When admitted, he had a temperature of 101.5° (which rose that afternoon to 103°), a pulse of 120, a slight cough, no coryza or conjunctivitis. Over the whole body, but most abundant on the legs, where it was deeper in shade, with an eruption of reddish spots from one-half to two millimetres in diameter, irregularly circular, coalescing in a few instances, elevated just enough to be perceptible to the touch, not exclusively associated with hair follicles, without special arrangement, not itching, and which fourteen days after its appearance—gradually faded without desquamation. On the hard and soft palate, were similar spots, with such modification in appearance as might be expected from their seat. It was also visible on the palms of the hands. Epitrochlear and inguinal glands to be felt. No œdema of legs or swelling of joints. Some sub-sternal soreness on coughing, but no tenderness or percussion. Tongue coated, bowels constipated, urine scanty and depositing urates, but otherwise normal. Auscultation of heart and lungs gave negative

results. The temperature, which gradually declined, was usually one-half to one degree higher in the morning, and became normal on the eighth day after admission. He complained once of a sore throat, which was speedily relieved by a chlorate of potash gargle. No trace of sores or induration on penis or in rectum.

The treatment was limited to rest in bed, regulation of the diet and the administration of a few doses of quinine. Dover's powder and phenacetin.

The interest in this case centres on the diagnosis. Without the eruption and during the prevalence of influenza, one would not hesitate to give the disorder that name. Cases of influenza accompanied by an eruption have recently been reported. Was this one?—*Bost. Med. and Surg. Jour.*, June 30, 1892.

**Burwell (J. P.) on a case of Diabetes Mellitus.**—The patient was a widow aged fifty-five. The urine had a gravity of 1048 with a large amount of sugar. She complained of severe bodily pains and frequent micturition. Tongue was red and glazed.

The writer prescribed three grains of gallic acid and one grain aqueous extract of opium t. i. d. Also two grains of ergotine night and morning. The diet consisted of milk, beef tea and gluten bread. Under this regime she rapidly improved and after six months she could indulge in an unrestricted diet.—*N. Y. Med. Jour.*, Jan. 2, 1892.

**Kramer (S. P.) on Recent Investigations on the Etiology of Diabetes.**—In a large series of experiments with ox blood at the chemical laboratory of the University of Cincinnati, the following was found: Both defibrinated blood and a mixture of three parts of blood and one part of a saturated solution of sodium sulphate, showed a glycolytic power. This, however, is not manifest during the first hour, is slight (10 per cent.) during the second hour, and becomes greater (20 per cent.) after four to five hours at 39° C. After twenty-four hours at 23° C. (decomposition being prevented by the addition of thymol), 75 per cent. of the sugar added to the blood had disappeared. It was found, moreover, that a temperature of 55° to 60° C. did not affect the glycolytic power of the blood. On the contrary it seemed to increase the amount of sugar discharged. Thus a loss of 14½

per cent. of the sugar added was found after an exposure to a temperature of 56° C. for one hour.

From the result of a series of experiments which will be published later, I am of the opinion that normally, a combination of the sugar and the albuminous principles in the blood takes place, in which form sugar is rendered suitable for the use of the organism. In the diabetic condition, this change does not take place.

The following may be added as a strictly true summary of the various investigations upon this subject: In the normal condition, the pancreas gives off a principle to the general blood supply by which the dextrose absorbed is so changed that its combustion by the organism is rendered possible. When the pancreas is removed, this change does not take place. The sugar is not utilized, but is excreted in the urine. The exact nature of the active principle and the change brought about by it remain a matter for further investigation.

In the discussion following this paper Dr. Fell, of New York, reported a case of abscess of the liver which had come under his observation in Buffalo. In some manner the abscess was ruptured, the contents passing into the intestine. The man had diabetes before the rupture; but after the rupture the diabetes passed away. From this incident as well as from many other well known facts and the observation of other cases, he thought that we have more than the pancreas accountable for the production of diabetes and that the liver had very important power in this direction.

Dr. Cohen, of Pennsylvania, remarked that Lancereaux divides diabetics into the two classes, fat and lean diabetics, and confines the pancreatic form of the disease to the lean diabetics. In the fat diabetics, lesions of the pancreas have not been found. There is still another class of diabetics, namely, those which bear a close relation to the uric acid formation. It would be very unwise, therefore, to say these theories absorbed the whole question of the etiology of diabetes. The important features of diabetes are rather the polydipsia and the polyuria, and not the mere presence of sugar. There is another form in which sugar is absent, but the polyuria and polydipsia follow a fatal course.—*Four. Am. Med. Assoc.*, July 23, 1892.

**Spencer (W. G.) on Amputation in Diabetes Mellitus.**—In a paper read before the Royal Medical and Chirurgical Society the author brought forward evidence to show that the timely adoption of amputation above the knee or elbow for the removal of severe inflammatory complications would prolong life, and very much reduce the amount of sugar excreted before operation. He urges that failures had resulted from amputating through the foot or leg when the vessels had been already narrowed or thrombosed, and that it was useless to attempt the reduction of the sugar by drugs and diet when a severe inflammatory lesion was present. Cases were quoted to show that healing readily took place in diabetics, especially a malignant case of diabetes mellitus attacked with erysipelas and abscess, and which died in diabetic coma three weeks after healing. He then compared two cases: one of suppuration around the femur above the knee with no bone exposed, treated by palliative measures, ending in diabetic coma; the other of suppuration around the elbow with the lower third of the humerus bare, which recovered good general health after amputation through the arm. Urine before operation 10, 1040 gr. to 1 oz. of sugar; after operation 1023, sugar a constant trace. Drugs and diet influenced neither case, except the latter after healing. Reference was made to other cases by Professors Roser, König, Kraske, and Heidenhain.—*London Lancet*, June 15, 1892.

**Rachford (B. K.) on Anæmia.**—The writer describes two cases giving the results of blood examination. He lays stress on continuing treatment until the hæmoglobin and cell percentage shall be brought up approximately to the normal. It should never be stopped simply on remission of symptoms. He also lays stress on the great danger of exposing anæmic girls with or without tubercular histories, but especially with tubercular histories, to the tubercular contagion. As physicians, it is our duty to forbid all young people remaining any length of time in the sick-room of the tubercular patient. And over anæmic boys and girls with tubercular histories we should be especially watchful, absolutely excluding them, if possible, from the sick-room. But should this not be practicable, as in many instances it will

not be, then it is the duty of the physician to examine the blood of the young people thus exposed to the disease, and if the amount of hæmoglobin is found to be below eighty-five or ninety per cent., they should immediately be given proper treatment and kept under treatment till the blood state approaches the normal.—*N. Y. Med. Jour.*, July 30, 1892.

**Kanthack (A. A.) on the Diagnostic Value of the Eosinophile Leucocytes in Leukæmia and Hodgkin's Disease.**—K.'s experiments negative the views put forth some time ago by Ehrlich and his followers relative to the value of the increase of eosinophile leucocytes in the diagnosis of leukæmia and Hodgkin's disease.

The following considerations will show that the eosinophile cell is of no specific importance in leukæmia:

1. Neusser, Leyden, and Janowski found large numbers of these cells in gonorrhœal pus, and my own observations on four acute cases confirm these observations.

2. Pus from subcutaneous abscesses of rabbits, dogs, and guinea-pigs often consists almost entirely of eosinophile cells.

3. Pus obtained from cases of purulent ophthalmia, which attacked some of the rabbits kept in a particular cage, also presented a considerable number of such cells.

4. Most specimens of human pus were likewise full of them. Such pus was obtained from two perineal abscesses, a psoas abscess, from a case of suppurative peritonitis, of necrosis of the jaw, and from several sloughing and granulating wounds.

5. The sputum of patients suffering from asthma, phthisis, and bronchitis often contain great numbers of eosinophile cells. I have examined six cases of advanced tuberculosis pulmonum, and in five the quantity of these cells was almost enormous.

6. In almost all specimens of early non-purulent inflammation in man, rabbits, guinea-pigs, dogs, or frogs, a large number of eosinophile cells is found in the tissues and vessels. These observations extend already over a long series of cases.

7. In muco-purulent nasal secretions numerous eosinophile cells are often noticed, and even human saliva at times contains some, though not in any large number.

8. Professor Dreschfeld mentions that they have also been found in nasal and

pharyngeal polypi, and Neusser and Canon have seen them in the corium of the skin in certain cutaneous affections. — *Brit. Med. Jour.*, July 16, 1892.

**Thayer (W. D.) on a Case of Leucæmia.**—The case was reported and patient exhibited before a recent meeting of the Clinical Society of Maryland. A colored man of about thirty years of age, first reported to the Johns Hopkins Hospital Sept. 15, 1890, complained of shortness of breath, swelling of feet, and great swelling of abdomen. The spleen was found to be enormously enlarged, filling up the whole of the left side of the abdomen and reaching beyond the median line. Examination of the blood showed one white to four red corpuscles. There was no history of malaria. He was placed upon Fowler's solution, three minims *ter in die*, increased by one minim every other day until physiological effects appeared. In about four weeks, the proportion of red to white corpuscles was one to seventeen. He then returned home to Virginia and ceased to take medicine. He came back again Jan. 29, 1891. His blood at that time showing a proportion of one white to three red corpuscles. He was put upon arsenic, and within nineteen days the leucocytosis had entirely disappeared.

May 27 he went away feeling very much better. His white corpuscles were normal and his red corpuscles numbered 4,000,000 in the cubic millimetre. His spleen, which had touched on the right Poupart's ligament, was reduced in size, extending only a hand's-breadth below the costal margin. He took arsenic in increasing doses until the dose reached twelve or thirteen minims *ter in die*. When physiological symptoms appeared the dose was reduced and then started up again. He took twelve minims regularly for a matter of two months without any symptoms. Nothing was heard of the patient for eight and a half months. On Feb. 9th of this year he returned. He said he had felt perfectly well until last Christmas. An examination revealed that his spleen was larger than ever before, legs oedematous and a proportion of one white to every nine red corpuscles. After a week's treatment in the dispensary, he was admitted to the hospital, where he has been for four weeks. During this time the red corpuscles have increased from 2,700,000 to 3,400,000, and the white have diminished so that the proportion instead of being one

to nine is now one to thirty-five. He has gained ten pounds. His spleen is somewhat diminished in size; and his general condition has improved very much. His reaction to arsenic each time has been very striking.—*So. Med. Rec.*, July, 1892.

**Brackenridge on Transfusion of Blood in Pernicious Anæmia.**—At a recent meeting of the Edinburgh Med. Chir. Soc., B. read a paper on the treatment of pernicious anæmia by the transfusion of human blood. He had met with nine cases of this disease during the last few years. In every case the ordinary treatment by iron, arsenic, etc., was first fully tried. In four of the cases this treatment was successful, but in five it was deemed necessary to resort to the transfusion of human blood. The cases were about equally distributed as regards sex. The ages varied from 25 to 63. The red corpuscles in some of the cases had fallen to something like 500,000 per cubic millimetre, and the hæmoglobin to 20 or even 16 per cent. There were the usual concomitant symptoms of anæmia: pallor, lemon-yellow skin, dyspnoea, hæmic *brûits*, etc. When it was found that the patients failed to respond to the empirical treatment of anæmia, and the patient was progressively getting worse, transfusion was performed in every case. The number of transfusions varied from one to four, and the quantity of blood transfused from two to six ounces. In one of the cases acute miliary tuberculosis set in shortly after the first transfusion, and death followed in something like three weeks. In another case a rigor came on a few hours after the first transfusion; shortly after pain in the arm, swelling, and phlebitis followed. This was found to be due to impure distilled water, which was used as a solvent for the phosphate of soda used to keep the blood liquid. This patient has now recovered from the phlebitis, and his red corpuscles, which had fallen to some 600,000, now numbered 2,000,000; he would, if necessary, be again transfused. Of the three others, marked improvement at once set in after the first and each subsequent transfusion. In some of the cases the red cells had risen to the normal number, and the patients were now practically well. Dr. Brackenridge urged that transfusion must now be considered not only a legitimate, but an obligatory line of treatment.—Dr. Affleck showed a case of a man over 60, whose red cells had fallen to 500,000, and

hæmoglobin to under 20 per cent. His condition was urgent; great dyspnoea, pallor, teeth loose in sockets, etc. Transfusion was at once done, and in a comparatively few weeks the number of red corpuscles had risen to about the normal, and the man seemed perfectly well and fit for his ordinary work.—*Brit. Med. Jour.*, July 2, 1893.

**Jones (E. S.) on Inflammation of Serous Membranes.**—J. believes that the so-called "idiopathic" inflammations of serous membranes are nearly always rheumatic in their origin. There have been several theories offered as to the etiology of rheumatism, but upon careful investigation of these theories, based upon a rational treatment, the acid treatment seems to be the most plausible. According to the modern physiological teaching, that during muscular action or exercise, sarcolactic, formic, butyric, acetic and other acids are formed, and carbon-dioxide set free in the muscular tissue, and that cold acting on the surface under such circumstances may check the elimination of these substances, and cause their accumulation in the system. There are other influences which may be regarded as auxiliaries to cold in exciting an attack, as they seem to increase the susceptibility of the patient to its operation; they establish what has been felicitously called a state of morbid opportunity; such influences as reduce the resisting powers of organ or organism, as bodily fatigue, mental exhaustion, the depressing passions, excessive venery, prolonged lactation and loss of blood, etc. But from a careful investigation of the pathology of rheumatic inflammation, it seems that the rheumatic poison has its predilection for synovial membrane, pericardium, pleura and peritoneum in the order just enumerated.—*Alabama Med. and Surg. Age*, July, 1892.

**Anders (J. M.) on the Cardiac Indications and Contra-indications in the Treatment of Pneumonia.**—There are three principal indications to be met, each corresponding to a cause of cardiac insufficiency. Of these, the baneful effect upon the heart of the toxic matter in the blood is the most pernicious, is a factor in every case, and is not unfrequently the sole cause of death. Cardiac exhaustion due to the action of these ptomaines can be differentiated and presents peculiar indications for treatment, specially useful being antiseptics, alcohol and strychnine.

In a large proportion of cases the right heart, already weakened on account of general infection, become further weakened and finally exhausted as the definite results of the obstruction opposed to the circulation in the lungs. In these instances the right ventricle is over-distended and congestive oedema of more or less of the non-consolidated portion of the lung exists. This combination of conditions calls for relief in two directions. First, the removal of the abnormal blood pressure in the pulmonary vessels must be relieved either by cupping or free bleedings; the cardio-pulmonary circulation must be facilitated by using inhalations of oxygen, and strengthening the right ventricle, by administering digitalis generously, strychnine and alcohol. The use internally of the nitrates in small doses is to be advised, while the use of all other arterial relaxants *is to be condemned*, since the agents that accomplish this end tend to depress the heart.

The third, though perhaps not the most unimportant cause of right ventricular exhaustion, are the cardiac thrombi, which are generated largely in consequence of the sluggish pulmonary circulation and the increased tendency to coagulation of the blood. Their presence is frequently demonstrable during the progress of the disease. For the purpose of preventing their formation preparations of ammonium should be employed, since, as before indicated, they tend to preserve the fluidity of the blood. When "heart clots" of appreciable size exist, and even when their presence is only highly probable, this agent should be exhibited in liberal amount, though as before intimated it is quite doubtful whether the remedy is powerful to liquify these offending masses. Digitalis is to be used cautiously, alcohol in moderate doses, and strychnia liberally.—*Four. Am. Med. Assoc.*, July 30, 1892.

**Shurley (E. L.) The Analogy between Acute Idiopathic Pleuritis and Acute Articular Rheumatism.**—This will become quite convincing if one takes the pains to carefully generalize and compare the various steps in the progress of the two diseases, idiopathic acute pleuritis and acute rheumatic arthritis. Besides, noting how frequently the plural as well as the pericardial structures participate in the rheumatic affection, I am aware that such a complication of articular rheumatism is not recorded by medical writers as of com-



mon occurrence. Yet, I believe, with all due deference, that it is because it is so frequently overlooked, just as syphilitic pleuritis has been, until recently, so generally overlooked; nor would such a mishap appear unusual when we consider how insidious and often localized may be an attack of fibrinous pleuritis. I certainly believe that a retrospective view of the clinical histories of cases of articular rheumatism by any practitioner present would recall certain signs of pleural implication, which, at the time, went unobserved, or were attributed to either secondary or concomitant manifestations, of cardiac complication.

I may mention such complaints as fugitive pain in the side, transient respiratory embarrassment, sudden exacerbations of temperature unattended by increased joint disturbance, etc. Moreover, the speedy relief obtained in pleuritic effusion by sodium salicylate, is corroborative evidence of the truth of the new advances.—*Four. Am. Med. Assoc.*, July 30, 1892.

**Griffin (T.) on Tobacco as Consumptive.**—For twenty years I have been engaged in the general practice of medicine, and during that time have treated many cases of pulmonary tuberculosis. I do not remember that one of my consumptive cases was a habitual smoker of tobacco. My reflections on this subject led me to suggest that tobacco smoke as inhaled daily and almost hourly by the habitual smoker, retards or prevents the development of the bacillus tuberculosis in the larynx and lungs of the smoker, as it has been demonstrated to prevent the development of the bacilli of typhus fever and pneumonia. Look back upon your cases of consumption and recall to mind any among them who were habitual smokers of tobacco. As far as I can recall to mind tobacco smokers have good lungs. I will here state briefly an interesting case, because it proves—as far as it has any value—the truth of my theory.

Mr. Lobb, a brick mason, aged about thirty-five years, about four years ago developed all the symptoms of pulmonary tuberculosis, with hemorrhages from the lungs. His physician diagnosed pulmonary tuberculosis. Two years after the development of the first symptoms a physician directed him to smoke and inhale the smoke of five cigarettes daily, and not to exceed that number. He directed him to

take no other medication. The patient soon began to improve, cough and hemorrhages finally ceased and he is now a healthy, active man, above the average in intelligence. He did not restrict himself to five cigarettes daily, but he gradually increased the number until at present he smokes at least one hundred daily.

[Granted that all the above is true, the whole question turns on this—as to whether the irritating effect of tobacco smoke on the average lung would not more than counterbalance its possible antiseptic influence. We should regard it as a pernicious practice to recommend smoking (especially cigarettes) to a patient with weak lungs.—ED.]—*Pacific Med. Four.*, June, 1892.

**Thorburn (J. D.) on Melancholia in Phthisis.**—The writer describes a certain class of patients as follows:

These patients are middle-aged, usually of a dark complexion, greasy skin, hair straight and coarse, and are by no means insane, but are those tuberculous victims who from the very onset of the bacillary disease lapse into a state of marked melancholia, the mental condition being increased by, and in turn influencing unfavorably, the ravages of the bacilli. In contradiction to "Neuralgics," the "Melancholics" are free from neuralgic and other pains, but if subject to them, bear them manfully and without complaint, preferring to be alone, and when spoken to about their health give an abrupt, if not a rude, reply. Their one topic of conversation seems to be the welfare of their families, if any, after the speaker's death. Medicine is looked upon with suspicion and is only taken under protest; usually atonic dyspepia, complicated with vomiting of food, within a short time of swallowing, is present. Next in importance to the melancholia is the marked insomnia. Natural sleep obtained at rare intervals is broken into by hideous dreams. The patient knowing this strives to keep awake.

When induced sleep is secured by administering paraldehyde or some other drug, an undisturbed refreshing rest is secured, and if this be repeated for a few nights the clinical history of the case is changed for the better, and this favorable change lasts for a considerable time.

A tuberculosis of the kidneys complicates the majority of the melancholic type. The prognosis in these cases is bad. Not only

for the patient himself, but their offspring are very liable to take on a rapid tuberculosis.—*Montreal Med. Four.*, July, 1892.

**Coleman (A.) on an Abnormal Origin of the Coronary Artery.**—Dr. Coleman presented to the New York Pathological Society two specimens of this condition. In one it was located one half inch and in the other one fourth of an inch above the free margin of the semilunar valve when pressed back against the vessel. With regard to the coronary circulation, it had long been held that the semilunar valves were pressed back during systole against the orifice of the coronary artery, thus preventing the entrance of the blood into this artery, while during diastole, as a result of the elastic recoil of the aorta and the reflux of the blood, the valves were forced into position. This has usually been accepted as the explanation of the mechanism of the coronary circulation, but it was manifest, from the specimens just presented, that in these cases the coronary arteries must have become filled, like the systemic arteries during the systole of the heart. In this connection it is interesting to recall some experiments made a few years ago by Dr. Newell Martin, of the Johns Hopkins University. By means of specially devised apparatus and the use of defibrinated blood, or normal salt solution, circulating through a mammalian heart after its removal from the animal, he had been able to prove that the systemic pulse and the coronary pulse were synchronous. Even when the coronary valves were hooked back so as to destroy their action, this synchronism was not affected. Again, it is to be remembered that in aortic stenosis, although the valves are not thrown back, the coronary circulation is fairly well maintained.—*N. Y. Med. Record*, July 9, 1892.

**Symes (W. L.) on Clinical Observations on Pleural Effusion, with Displacement of the Heart.**—The author regards the following facts sufficiently well established:

1. That displacement of the heart may occur as early as the fourth day; that a moderate effusion can produce it; and that it may be preceded and accompanied by fainting on exertion.

2. That it occurs before protrusion of the intercostals, and the heart may even pulsate beyond the right nipple while they are not affected.

3. That, owing to the peculiar basic attachments of the heart, the apex can move in the arc of a circle, right or left; that the heart appears to rotate upon its long axis; and that this rotation in dextrocardia may increase the distinctness of its sounds and impulse.

4. That the heart does not return by the same route, but on a plane somewhat higher, and that this course, whether real or apparent, is dependent upon the non-expansion of the lung.

5. That extreme displacement may exist without either *bruit* or palpitation, and does not *ipso facto* necessitate paracentesis.

6. That it is extremely dangerous for the patient to undergo any exertion when it is so displaced, owing to the many risks of sudden death.

7. That decubitus on the sound side, or or in a semi-dorsal position inclined to that side, appears to lessen the tension of the fluid; that it is always a grave symptom, and an urgent indication for paracentesis to relieve tension.

8. That "*le bruit Skodique*" is caused by the compression of healthy lung against the bronchus, thus acting as a better conductor of sound; that it is closely connected with high tension; and that it disappears when the intro-thoracic pressure falls.

9. That the dangers of displacement being intimately connected with the condition of the opposite lung, the extent of dislocation, *per se*, forms no criterion—some slight displacements ending fatally, while other extreme ones are borne with impunity.—*Dublin Med. Four.*, July, 1892.

**Wallace (J. H.) on Exophthalmic Goitre.**—From a careful study of the history of the disease and experience with a number of cases, the writer states his views regarding pathology as follows:

There is and must be an atomic condition of the vascular muscles involved in Basedow's disease and that the disease does originate in the sympathetic nerve or in the spinal centre or in the fibers of the sympathetic; that the disease is the result of a neuropathic condition of the vaso-motor ganglia in the medulla oblongata or in the cervical ganglia, and in consequence of which there is compression of the ganglia, which results in partial paralysis of the vaso-motor nerves, which preside over the vascular system, giving rise to dilatation of the blood-vessels of the brain and distention of the blood-vessels in general, in con-

sequence of which we have protrusion of the eyeballs, enlargement of the neck, œdema of the lungs, palpitation of, and in some cases dilatation of and even paralysis of the heart. Death may occur from disease of the heart, pulmonary tuberculosis, from gangrene of the extremities, pulmonary apoplexy, or œdema.—*West. Med. Rep.*, June, 1879.

**Davis (N. S., Jr.) on Non-valvular Heart Murmurs.**—By non-valvular heart murmurs, I mean heart murmurs that are produced without structural change in valves. Such murmurs are common. They often cannot be distinguished from those that are produced by valvular deformities. The physical signs which accompany valvular lesions enabled the diagnostician to locate the morbid process and to determine the character of interference with the circulation which it produces, but does not make it possible to decide on the pathological character of the lesion.

Attention is called to the history of these cases to emphasize the fact that not unfrequently the murmur of a non-valvular lesion is the same in character and location as a valvular one, and that it may be accompanied by the same changes in the size and shape of the heart and other organs.

The differential diagnosis is then given between pericardial adhesion sounds, anæmic murmurs, and those due to true valvular disease. In closing, D. says :

It is true that for the diagnosis of a heart disease the *tout ensemble* of cardiac physical signs is of the greatest importance, the mode of their development, the condition of the patient before and at the time of examination, the existence of a former illness such as rheumatism or chorea, the progress and complication of the affection, in a word the medical history of a case is of equal importance. A diagnosis often cannot with safety be based upon physical signs only.—*Four. Amer. Med. Assoc.*, July 30, 1892.

**Marshall (E.) on Cardiac Mechanism.**—In a paper discussing the various factors of the circulation, the writer expresses his doubts as to the relative importance of the suction force of the chest. His reasons are as follows :

1. The heart acts four times while the lungs are acting but once.
2. Circulation continues temporarily even when respiration has stopped.
3. When the thorax is opened for the

purpose of examining the heart in a living, warm-blooded animal, if artificial respiration is kept up, the heart will continue to act for some time, yet, of course, there is no suction power due to a distended thorax present at such a time.

Concerning the cause of the apex beat, he says :

Now, the systole begins above and travels like a wave from the great veins to the apex, but, mark you, the apex is the last to act. When ventricular systole begins the blood is forced toward the inactive apex, and this strong girdle of circular fibers in the left ventricle crowds down the volume of fluid and resist any distension at that point. For three reasons I believe a bulging occurs at this time due to this hydrostatic pressure :

1. Muscle active above and inactive below.
2. The strong centre resists distension.
3. The weak, inactive apex protrudes before the pressure.

As soon as the power in the ventricle is sufficient to overcome the resistance in the great arteries the blood rushes out and the heart becomes shorter, due to the contraction of the longitudinal fibers.—*Am. Pract. and News*, June 16, 1892.

**Richardson (B. W.) on Oatmeal Pyrosis.**—The writer believes that the oatmeal which forms the breakfast staple of so many people of abstemious habits is the frequent cause of pyrosis. This he has frequently demonstrated in patients who did not at all improve on medicines, but who on giving up oatmeal became and remained perfectly well. In his own person he has found that barley water would after a while produce a similar result.—*Asclepiad*, July, 1892.

**Parsons (A. R.) on the Desirability of Operative Interference in Suspected Perforation of Chronic Ulcer of the Stomach.**—The clinical history of three cases are given together with the *post-mortem* finding.—From the data furnished an attempt is made to deduce the phenomena which indicate perforation. The writer says : In diagnosing a perforation of the stomach, we have to rely mainly on the sudden onset of very violent pain, often described by the patient as doubling him in two, the accompanying collapse, pallor, and anxious expression of the face, a pulse small in volume, compressible and steadily increasing in frequency ;

vomiting is also often, though not invariably, present; and the respiration will probably be rapid, chiefly thoracic, and productive of pain on deep inspiration. If we see the patient a few hours later, the severity of the pain may be slightly abated, the collapse not quite so marked, and the color improved, but the frequency of the pulse has increased from 90 or 100 to 110 or 120, with probably diminished volume and augmented compressibility. Visiting our patient some hours later—say 12 or 14 after the perforation had taken place—he expresses himself as much better; he has no longer the intense pain from which he suffered earlier in the day; there is no impairment whatever of his intellectual faculties; but, on the contrary, he is quite clear and collected, and looks to you to confirm the favorable opinion he has formed of his own condition. But, as you take his clammy hand in yours, and try to count the pulse, now barely perceptible at the wrist, as you feel the cold extremities, and see the sweat gathering on the pallid countenance, you read the words “No hope!” written clearly on every feature. The prognosis is soon equally evident to the untrained eye. Restlessness comes on, slight delirium sets in, the pulse can no longer be felt, respiration becomes quick, shallow, irregular, slow, and finally ceases, in the majority of cases, in from twelve to twenty-four hours after the perforation took place.

Parsons believes that while the results of operative interference have thus far been unpromising, coming years will yet see a great advance along this line. The time will come when abdominal section for perforation from gastric ulcer will rank as a legitimate surgical procedure.—*Dublin Med. Four.*, July, 1892.

**Dabney (W. C.) on a Contribution to the Study of Hepatic Abscess.**—The following conclusions, it seems to me, are either warranted or rendered highly probable:

1. That hepatic abscesses rarely occur as a result of injuries or diseases of the bones or other parts of the body, except those directly connected with the portal system of veins, or immediately adjacent to the liver.

2. Ulceration of the bowels is a common cause of hepatic abscess, but neither the morbid changes nor the symptoms are those of simple dysentery. It is probable that in

most cases, at least, when the hepatic abscess is due to dysentery the latter disease is amoebic in character.

3. An hepatic abscess may appear in two weeks from the commencement of the dysenteric attack, but the usual time is from four to twelve weeks. It is impossible to say how long a time must elapse after an attack of dysentery before all danger of hepatic abscess is past.

4. Abscesses originating in the bile-ducts and those due to injuries of the liver itself seem to be of comparatively rare occurrence. When due to injury, the abscess usually appears in a few days.

5. Abscesses occurring in connection with general septicæmia or pyæmia are probably nearly always multiple in number and small in size, but in rather more than half of all other cases the abscess is single and comparatively large. Abscesses due to gall-stones, however, are usually multiple.

6. Aspiration occasionally fails to reveal an hepatic abscess, because the needle may not enter it, or the contents of the abscess may be too thick to flow through the needle.

7. There are no means of determining with certainty the presence or absence of adhesions in a given case; pain, tenderness, and œdema over the seat of the liver suggest the presence of adhesions, but are by no means certain proof of their existence. Even the up-and-down movement during respiration of a needle inserted into the liver is not a conclusive proof that adhesions do not exist, as was shown by a case recently under my care.

8. Of the symptoms and signs of hepatic abscess, pain, tenderness, and swelling in the hepatic region are by far the most important. Fever is present in a large proportion of cases, is intermittent in character and except in pyæmic cases rarely rises above  $102.5^{\circ}$  or  $103^{\circ}$ . Jaundice and ascites nearly always denote the presence of dense adhesions or gall-stones. Dyspnoea and cough are frequently present.

9. It is doubtful whether the absorption of the contents of an hepatic abscess ever occurs; bursting is of frequent occurrence, the most usual direction being into a bronchus or the pleural cavity. Under expectant treatment death occurs in a large proportion of cases before bursting.

10. With respect to treatment free incision and drainage give far better results than any other mode. The results of

aspiration are rarely satisfactory nor is aspiration itself free from danger.—*Am. Jour. Med. Soc.*, Aug., 1892.

**Shoemaker (D.) on a Cystic Condition of the Appendix Discovered Post-Mortem, and Not Giving Rise to Symptoms During Life.**—The patient, a carpenter, aged sixty years, was admitted to hospital, December 9, 1891, with symptoms of pulmonary congestion. Upon physical examination the area of cardiac dulness was found greatly increased; the tones at the apex were clear, but feeble; over the aorta was heard a systolic and diastolic murmur.

A diagnosis of dilatation of the aorta, with aortic regurgitation, was made, and the respiratory difficulty was ascribed to the condition of the heart. He was put upon digitalis and strychnine, and made rapid improvement. The patient was discharged on January 20, 1892, at his own request.

On February 1, 1892, he was re-admitted, and was found to have croupous pneumonia. Beside other things, he complained of slight tenderness in the region of the cecum, and expressed a constant desire to have his bowels moved. He died on the fifth day after admission.

At the autopsy the diagnosis, with regard to the heart, was verified. All the heart cavities contained *ante-mortem* clots, and, extending up the arch of the aorta and a short distance into the innominate and left common carotid arteries, was a large, cord-like *ante-mortem* clot. The entire right lung was pneumonic, the liver sclerotic, and the spleen deeply engorged. The appendix vermiformis was found to be cystic. It was separated from the bowel during some slight manipulation, but the contents did not escape, the communication between it and the gut having been occluded. The cyst was 4 inches long and measured  $1\frac{1}{2}$  inches in its broadest diameter. A small portion of the distal end was not dilated, and at about the broadest portion of the cyst was a thinned area, seemingly about to rupture.—*Occident. Med. Times*, July, 1892.

**Niewondt (G.) and Rosenzweig (R. H.) on a Case of Milky Ascitic Fluid.**—A sickly female child, aged fifteen months, suffered from diarrhoea and vomiting. Abdominal distension with fluid gradually supervened, and aspiration was practiced on several occasions. The pa-

tient eventually made a good recovery. The fluid was regarded as of inflammatory origin. It was of a dense consistence, closely resembling milk in color and appearance, specific gravity 1022, reaction neutral, of a faintly-sweetish odor. There was no spontaneous coagulation, nor was there any pinkish discoloration, even after an interval of four or five days. With heat a heavy coagulum formed; on the addition of cold nitric acid a white precipitate formed, which, on being heated, changed to yellow. Caustic potash increased the fluidity. Microscopical examination showed finely-granular matrix, with large nucleated cells interspersed, bearing, therefore, on the whole, but slight resistance to the generally accepted characters of chyle.—*Brit. Med. Jour.*, July 16, 1892.

**Christopher (W. S.) on Retained Fæces.**—The following conclusions are submitted:

1. Long continued partial retention of fæces is common.
2. Such retention is usually harmless.
3. Retained fæces undergoing putrefaction may, at any time, acquire poisonous properties.
4. Retained fæces may produce either local or constitutional symptoms.
5. The principal local conditions produced by retained fæces are typhlitis, appendicitis, and peritonitis, either localized or general.
6. Retained fæces, through the poisons produced in them, are capable of causing any constitutional symptoms which can be manifested through the agency of the central nervous system.
7. Among the toxic effects of such stercoræmia may be mentioned fever, convulsions, coma, insomnia, headache, neuralgia, vertigo, anæmia, diarrhoea, constipation, incontinence of urine and fæces, insanity, etc.—*Four. Am. Med. Assoc.*, July 23, 1892.

**Voorhis (C. H.) on Complete Absence of Urethra; Operation and Cure.**—Mrs. L—, married, gave birth to a male child on October 9, 1891. The child was to all appearances healthy, robust, and perfectly formed. Thirteen hours after birth it was discovered by the nurse that the child had passed no urine. The father was immediately sent after the doctor, who upon examination found the child had a malformed penis with no opening to the bladder. The doctor and nurse at-

tempted an operation, but failed. I was immediately sent for, and assisted Dr. Burnside in making one. A tenotome was used, which, beginning at the meatus, was directed downward and inward to a point beyond where the ejaculatory ducts should open into the urethra, before we struck any canal. We then passed a probe into the bladder, and relieved the little one of the accumulated urine. For several days afterward the small probe was passed, and soon the child was able to void its urine alone, and is now a stout, fat, and well-developed baby.

The child's penis at birth presented the appearance of one who had been circumcised or operated upon for phimosis. It was one inch in length; the foreskin drawn back and notched upon the top. The glands and testicles were well formed and healthy in appearance.

The question now presents itself, Will this child (when grown to manhood) be able to beget children? Will nature restore the opening of the ejaculatory ducts into the canal made by human hands?—*N. Y. Med. Record*, March 12, 1892.

**Hare (H. A.) on Malarial Hæmaturia, or Hæmo-globinuria, and the Value of Quinine in this Affection.**—Hare has collated statistics on the "collective investigation" plan with regard to this malady. He finds the trouble more frequent in males between the ages of ten and forty-five years. The condition is to be regarded as a dangerous one. Hence our need of definiteness in therapeutics. Bloody urine is not a disease of itself, but only a symptom. The relation of hæmaturia to the paludal diseases may be a four-fold one.

In the first place, there are many cases recorded in the literature of the subject in which bloody urine has come on with the first malarial paroxysm, of the intermittent type, which the patient has ever had, and at a time when the history of the case renders it certain that a hidden malarial condition could not have previously damaged the renal tissues or those of other organs in the body.

Secondly, we have cases in which bloody urine appears not in the first malarial paroxysm of the intermittent type, but in association with the later attacks, which may have followed the first rapidly or slowly. In these cases there may be no further cause for the hemorrhage than excessive

congestion, but in all probability the vast majority of cases present distinct renal changes which permit such a symptom to develop when the paroxysm asserts itself.

Thirdly, we pass from these cases of bloody urine due to intermittent forms to those due to remittent attacks, which, in many cases, have gradually merged from the first into the remittent. In these patients the process by which we have developed a bloody-colored urine may be very complicated, since it may be due to renal incompetence, functional or organic, or to a true hæmoglobinuria arising from dissolution of the red blood-cells in the blood-vessels or blood-making organs.

Fourthly. Bloody urine appears, indirectly malarial or entirely free from malarial influences. This condition is sometimes called paroxysmal hæmoglobinuria, although it is distinct from that due to any parasite. That is to say, the mere chilling of the surface may cause insusceptible persons a hæmoglobinuria similar to that caused in such individuals by immersing the hands in iced water, and this condition may be produced either by exposure to cold and damp, which are generally present in malarial localities, or to the chill of the milder forms of malarial paroxysm.

The very important question—as to whether quinine produces hæmaturia independent of malarial influence—has already been discussed and answered affirmatively, and it seems to be an undeniable fact that in some persons quinine possesses very distinct hemorrhagic tendencies.

The writer's conclusions are that the cinchona alkaloids are better omitted. He says: I think it is evident that, in the presence of the milder forms of the disease, it should not be employed during the hæmaturia, nor in those cases in which idiosyncrasies exist.

In those cases which are malignant in their manifestations in other lines than the mere hæmaturia, and depend on a malarial paroxysm superimposed on a malarial dyscrasia, then quinine is needed, but in that hæmaturia following prolonged subacute or chronic malarial poisoning quinine is not to be given in full doses, but only as a tonic, the physicians relying upon change of climate, nutritive foods, tonics, and other drugs to renovate the patient's tissue. —*Therap. Gazette*, July 15, 1892.

**Lisle (J. D.) on Effect of Asparagus on Urine.**—A gentleman presented himself before the medical examiner of a certain life insurance company for examination. When it came to the examination of the urine, it was found to respond to Fehling's test for sugar by causing a precipitate of the suboxide of copper ( $\text{Cu}_2\text{O}$ ). This fact was communicated to the gentleman, in whom it occasioned considerable mental uneasiness. Going immediately to his family physician, he stated his case, and was, by order of his physician, referred to me. When in my presence the gentleman voided about 250 cc of urine of a light straw-color, specific gravity 1030, almost odorless, and of acid reaction. Upon applying successively Trommer's, Fehling's, and Böttger's tests, the urine responded to them all, thus indicating the presence of sugar; but upon fermenting a sample not a trace of sugar was revealed. To harmonize these results, it became necessary to ascertain what was causing this unusual reaction. The only solution of the difficulty appeared to be in the fact that the gentleman had on the day previous eaten heartily of asparagus. To confirm this, on the day following I tested my own urine by the above-mentioned tests (including fermentation), and no sugar was detected. I then ate a quantity of asparagus and tested my urine afterward every half-hour. In about an hour and a half the urine possessed the peculiar odor so well known, and responded to all the tests mentioned save fermentation. Twenty-four hours later a trace yet remained, but in forty-eight hours even that disappeared. I have repeated this experiment in eight cases with the same results. The light of these experiments leads me to this conclusion: That the ingestion of asparagus does *not* cause saccharinity of the urine, but something is formed and excreted which causes a response to the reagents used by physicians for detecting sugar; but by fermentation all doubt can be set aside.—*N. Y. Med. Four.*, July 9, 1892.

**Indigo in Urine.**—At a meeting of the London Pathological Society, held May 17th, Dr. Ord exhibited a drawing showing indigo deposited naturally in the urine of a patient who had suffered for ten years with symptoms indicating enlargement of the prostate. The urine was alkaline and offensive, and contained a number of flaky masses, which under the microscope were

found to be altered mucus, containing embedded in them a large number of dark blue bodies, apparently composed of some crystalline material partly stained by indigo, partly having indigo deposited on them. These Dr. Ord considered to be either urate or phosphate. He knew of no artificial method whereby indican present in alkaline urine might be decomposed so as to form indigo blue without inducing an acid reaction. It appeared to him that the form of the indigo was determined by the form of the substance upon which it had been deposited. He described the ordinary method of obtaining indigo from urine either in the form of a solution in chloroform or in a film deposited on the surface of the fluid, of which he showed the microscopical appearances. If a solution of uric acid were added to the urine before performing the test, crystals of uric acid partly stained and partly encrusted by indigo were found at the bottom of the fluid. Epithelial-cells, yeast-cells, and rod-shaped bodies resembling bacteria were also found similarly stained, and colored drawings illustrating these were shown. Occasionally hedgehog crystals of presumably uric acid were found deeply colored. It appeared to Dr. Ord that the use of nascent indigo might possibly be of use in the staining of bacteria.—Dr. Wheaton asked if there might not be another interpretation, namely, that the indigo was due to the growth of the bacteria. He mentioned the case of a hysterical woman who had passed indigo in the urine for a few hours only.—Dr. Crookshank asked if any cultivation of the organisms had been attempted.—Dr. Ord, in reply to Dr. Wheaton, said he had found bacteria in one or two only out of numerous specimens. In reply to Dr. Crookshank, he said the organisms had not been isolated, but he hoped that it would be done.—*Brit. Med. Four.*, May 21, 1892.

**Kolipinski (L.) on a Case of Hydrogen Disulphide in the Urine.**—A man aged sixty-seven, alcoholic, suffered from chronic gastritis. Later he developed insomnia and mental hebitude. There had long been feebleness and unsteadiness in walking and complaint of shooting pains in the lower limbs, which, with a decided atrophy of their muscles, were ascribed to chronic alcoholic neuritis. His wife had noticed a slight evening fever, which at first could not be confirmed. There was

complete anorexia, and with this there was an intermittent desire for strong drink. His feebleness confined him to his bed, and apathy made him converse but little. Profuse nightly incontinence of urine alternated with a frequent desire to urinate by day. The prostate was moderately enlarged, but further urethral and vesical exploration was omitted, because of the man's general condition.

My attention had been called to the strong, peculiar odor of the urine before the symptoms of vesical disturbance began. On examination I found, June 5, 1891, the urine of a red color; acid reaction; slightly turbid; without sediment; specific gravity 1018; no albumen, bile, or sugar. By lead-acetate paper,  $H_2S$  was found to be present. A few epithelial cells were found.

For one month—during which time the patient improved so much that he was able to leave his bed, digest food, and take a renewed interest in the things of every-day life—the urine continued of the same composition. It was frequently examined, and with strict precaution as to its freshness, and the continuous presence of  $H_2S$  was uniformly detected. The question to be solved was, Where and how did the  $H_2S$  originate? The most plausible theory of intestinal decomposition and absorption was entertained and rejected, the evacuations being fairly regular and healthy. The speculation that its origin was from pre-existing cystin could not be proved by finding the latter, and finally the otherwise normal character of the urine excluded the assumption that it was a product of abnormal substances like albumen or pus. The books at hand helped me to no clue.

At the end of a month the patient's condition again grew worse. His bad symptoms were intensified, nocturnal fever returned, and the urinary incontinence grew annoying. A persistent hiccough gave the patient no rest. There now appeared a new light to clear up the mystery of the  $H_2S$ . The patient began to complain of pains about the anus at the site of a former ischio-rectal abscess. There was found on the right side round a small circular cicatrix a moderate area of induration, extending forward to the scrotal fold, slightly tender and fluctuating. A free incision gave exit to about an ounce of pus having a strong odor of  $H_2S$ . The abscess was thoroughly washed out and left clean

and dry. The hiccough had now continued for twenty-four hours.

At the end of a month the patient died, having passed through an intense febrile reaction. Apparent improvement and a relapse with typhoid state.

The autopsy, which was confined to the abdominal cavity, showed a dilated stomach, its mucous membrane, as well as that of the small intestine, containing spots and patches of extravasated blood. The kidneys were cirrhotic, the right containing several cysts and calcareous infarctions. The liver was in a state of fatty degeneration, but not markedly diminished in size; there was little evidence of cirrhosis. The spleen was dark and friable and not enlarged. In the gall-bladder was a little pale bile and two small calculi. The skin was of a natural color, and there was no fluid in the abdominal cavity. The ischio-rectal abscess was thoroughly explored and found empty and granulating. The bladder was contracted, and there was no induration or inflammation in its neighborhood. It appears, then, that acholia was the cause of death. The absence of icterus was a singular feature. *Phil. Med. News*, July 6, 1892.

**Wood (E. S.) on Renal Albuminuria not Due to Organic Disease of the Kidney.**—I think we may consider that, clinically, all cases of renal albuminuria, not due to organic disease of the kidneys, may be arranged in one of the three following classes:

I. Those due to some general disease or disturbance (not renal) which causes some change in the renal circulation.

II. Those due to irritation of the kidneys, which irritation may be general, as in the case of the chemical (or dissolved) irritants, or circumscribed, as in the case of some mechanical irritants, such as concretions in the substance of the kidneys.

III. Those due to some change in the composition of the blood.

The duration of the albuminuria naturally varies with the cause. It may be permanent as when due to organic disease of some other organ, in which case the kidneys themselves may, after a long time, become affected with some form of organic disease, or it may be temporary, lasting for a longer or shorter time, according to the cause.

I. In the first class, due to some interference with the renal circulation, we may include:



(1) The febrile albuminuria which is invariably seen in acute diseases attended with high temperature. In these cases the quality of albumen is usually only the very slightest trace, which with the accompanying casts, entirely disappears as soon as, or very shortly after, convalescence begins. In rare cases in ordinary acute diseases the quantity of albumen may become quite large and the renal casts very numerous, so that from a single examination it may be impossible to say whether acute nephritis has been superadded to the other febrile affections or not.

(2.) Disturbances due to nervous diseases, such as delirium tremens, acute mania, etc.

(3.) Passive hyperæmia of the kidneys, due to certain organic diseases of the heart and liver, to the presence of abdominal tumors, etc.

(4.) Almost any serious disease wherever located tends to produce secondary effects on the kidneys which result in albuminuria and the presence of casts. The effect may be due to a simple disturbance of the circulation from pressure. As in the case of tumors or through the nervous system or they may be due to the diminished metabolism resulting in an increased formation of uric acid or calcium oxylate which will locally irritate the kidneys.

(5.) Albuminuria of adolescence.

II. Rena-Irritation. The most common causes of renal irritation are: (1) a very concentrated condition of the urine. (2) The action of chemical (or dissolved) irritants, which include some of the abnormal constituents of the urine, (a) sugar, (b) bile, (c) the irritating products of scarlatina, diphtheria, and the like, and (d) numerous irritating drugs and poisons, such as cantharides, arsenic, salicylic acid, salol, and many others. (3) Mechanical irritants, such as crystals and concretations of

uric acid, urates, calcic oxylate, cystin, etc. We often see two or more of these causes acting at the same time. Especially are we apt to have a very concentrated condition of the urine associated with one or more of the other irritants.

(III). Blood Diseases: The change in composition of the blood causes albuminuria and casts. The latter are almost always hyaline unless the blood pigment is also separated by the kidneys, in which case we find in the sediment brown-granular casts and brown amorphous matter as in cases of hæmoglobinuria.—*Bost. Med. and Surg. Jour.*, May 22, 1892.

**Harris (J. W.) on a Case of Acute Orchitis following Influenza.**—On Nov. 26th I was called to see a man, G—W—, aged sixty-seven, a widower. He was complaining of "pains all over," more especially in the back, head, and back of eyes. Slight cough. Temperature 103.2; pulse 120. Tongue slightly furred; bowels open. I gave him twenty grains of salicylate of soda every four hours, and he gradually lost his fever and pain. On Dec. 1st on visiting him I found him complaining of pain, tenderness, heat swelling, and redness of the left testicle. Temperature 102°. I gave him an aperient and saline mixture, with one grain of potassio-tartrate of antimony, every four hours, and he gradually recovered, and on Dec. 21st he was down stairs.

There being an epidemic of the so-called "influenza" in the town, I looked upon this case of one of acute orchitis following influenza. As the patient never got out of bed, had no trouble with his urine, and could account for the swelling in no way, and orchitis coming on as it does after mumps (metastasis), the case seems to me somewhat obscure.—*London Lancet*, Jan. 2, 1892.

## MISCELLANY.

**Scientific Temerity.**—To play with "edged tools" has always rightly been deemed to be a dangerous pastime. Although somewhat hackneyed in the caution which it conveys, nevertheless the saying contains a large measure of truth of the importance of which it is always best to be mindful. The recent discoveries of science, and especially those in the department of bacteriology, afford many illustrations of

what is meant by "playing with edged tools." Pathogenic organisms, of intense virulence and capable of readily producing their respective pathological effects in the human body with fatal results, are now cultivated at will by the bacteriologist. Cultivations, moreover, of many of these deadly micro-organisms in the majority of cases are so easily obtained that reasonable doubt may be held to exist whether due

care is taken to sufficiently destroy them after the purpose of "cultivation" has been served. The lamented death of a London physician at the early age of thirty-five, last week, was directly due to infection arising out of a want of discretion in dealing with the micro-organisms upon the investigation of which he was engaged. It is reported that he was accustomed to carry his lunch in his bag together with the cultivations of the deadly bacilli, quite regardless of any consequences which might ensue. As was to be anticipated, such temerity has been paid for at a terrible price—no less than by the death of the investigator, who fell into the extreme error of treating with contempt the virulent micro-organisms which he was able to produce at will. It is sad to have to record the death of a *confrère* under such painful circumstances. Science always has had and always will have her victims, and this untoward feature of scientific research is not a little due to the great interest, zeal, and submerging of self which are bred thereby. Out of the intense eagerness to follow the light, the first gleam it may be, which certain investigations have become the source of in the midst of an obscure problem of disease, rash acts are done from a forgetfulness of the caution which is necessary always to be borne in mind while "playing with edged tools."—*Med. Press*, Aug. 3, 1892.

**Food Preservatives.**—It is really time that we had some official statement on the propriety or otherwise of employing chemical substances either to prevent the decomposition of unstable articles of food, or for the purpose of neutralizing its effects. The two substances most in view are boric and salicylic acids, and these, or one or other of them, are used daily to an enormous extent with this object in view. There is want of uniformity in judicial decisions in respect to the additions which directly encourages the dealers to continue the practice, and an authoritative pronouncement on the point is urgently called for. A very great difference of opinion prevails as to the effect on health of the habitual ingestion of these antiseptic substances. Speaking generally, it would of course be preferable that the dealer and the manufacturer should rely on freshness of products and cleanliness in manipulation to prevent changes calculated to damage their merchandise, but, on the other hand, if it can

be conclusively shown that the addition of minute quantities of these preservatives is not followed by any tangible effect upon health, then their use would be very properly not only authorized, but encouraged, on economic as well as on dietetic grounds. If the Local Government Board would instruct a committee of experts to thresh out the matter and report thereon we might be enabled to dispense with the cumbersome and costly parliamentary inquiry which will otherwise be necessary. The question is one far easier to decide than the dissemination of tuberculosis or the means of curing it, and even total prohibition would be preferable to the present state of uncertainty.—*Med. Press*, Aug. 3, 1892.

**Alexander (W.) on the Restoration of the Apparently Drowned.**—In my lectures of instruction on this subject I have been in the habit of teaching a combination of the two plans, Sylvester's and Marshall Hall's. Having first placed the patient on his back on an inclined plane with *the feet raised*, and the head thrown forcibly backwards, which insures the raising of the epiglottis, thus affording a means of exit to any fluid in the air tubes, and likewise a means of entrance for air when artificial respiration commences; with an assistant to steady the feet, the forearms are seized and forcibly extended above the head, then brought down suddenly to side, a hand of each operator at the same time pressing downwards the ribs in front; the patient is then rolled over, taking care that the face is not injured, then brought back quickly to the original position. This is to be repeated eighteen times to the minute, and always to the same side, till natural respiration is established, as it seems in accordance with reason that if water has invaded the lungs, it would give a person a better chance of resuscitation to thus clear one lung by gravitation and expulsion, and when life was restored then to vary the position. Warmth should, of course, be promoted by friction and hot flannels if available, care being taken not to give the *coup de grace* by pouring brandy or other alcoholic drink into the mouth before the power of swallowing is re-established.—*Edinburgh Med. Four.*, Aug., 1892.

**Marchand on Phlegmon of the Neck.**—At the Société de Chirurgie, M. Marchand spoke on phlegmons of the neck, to which the name of Ludwig's pharyngitis was given by some authors. For M. March-

and, these deep-seated abscesses of the neck could be divided into two classes; the first, those developed in the sheaths of the larger vessels of the neck, while the second corresponds to the maxillo-pharyngeal space. The first type is characterized by the phlegmon, commencing in the pre-carotidian ganglions or the cellular tissue surrounding these ganglions; they represent an elongated form, running in a vertical direction, that is to say, follow the vessels with a tendency to reach the lower part of the neck. They frequently produce symptoms of oppression, the dyspnœa being at times so distressing that tracheotomy is often thought urgent. He observed during the last few years several such cases. The plegmons corresponding to the floor of the mouth had a great analogy with the last named, as far as the hardness of the tissues are concerned as well as the dyspnœa; there is also considerable dysphagia present. These abscesses always originated in either pharyngitis of an infectious nature or in some dental lesion, and especially in those accidents attendant on the evolution of the wisdom tooth. This type was always marked by a special gravity. M. Verneuil protested against the name of Ludwig being associated with the affection, as that author did not fully describe it. He could cite several cases of those phlegmons, and amongst others the following:—A young man, after some days of overwork, was seized suddenly with violent fever, and at the same time appeared considerable œdema of the floor of the mouth, pushing the tongue up towards the palate; a large hard tumor was felt under the chin. M. Verneuil used the thermo-cautery very freely, but the man sank rapidly. A second case was that of a little girl of eight, who, previously in perfect health, was seized with a violent sore-throat. In two days the whole neck and the mouth became enormously tumefied, and in spite of numerous incisions the child succumbed the same evening.—*Med. Press and Circular*, Aug. 3, 1892.

**Gilliam (D. T.) on the Operative Treatment of Ventral Hernia Resulting from Abdominal Section.**—*Operation.*—With a curved sound depress the pouch over the median line, carrying the instrument in toward the cavity, and with tenacula approximate the sides, being careful not to use traction, as there must be no tension. The line of contact will be found to be elliptical. This may be blazed, or marked

out with iodine or ink. Now, with scissors and tenaculum, follow this around, laying bare the fascia and working toward the centre, until an inch or more is exposed. This leaves an elliptical island surrounded by an elliptical furrow. It is well to freshen the outer margin of the skin of the island. If the area is not too large I am in the habit of denuding the whole. Bleeding vessels being secured, the blood and *débris* cleared away, and the parts washed with an antiseptic solution, a small rubber drainage-tube is slipped over the sound and the parts depressed as before. The tube must be long enough to project at either extremity. The use of the tube is sometimes dispensed with, especially if the entire surface has been pared. A continuous catgut suture is now run along the inner aspect of the denuded strip and made to include the skin-margin of the central island. A second and a third row are superimposed until the gap is closed and the parts brought into nice apposition. The probe is now withdrawn, leaving the drainage-tube in place. Aristol is sprinkled over the wound and a heavy layer of gauze over this.

Strips of rubber adhesive plaster, to which tapes have been attached, are now applied to the sides of the abdomen well down, and the tapes tied over the dressings in the median line. Over this is placed a thick layer of absorbent cotton, held in place by a four-tailed flannel bandage. The patient is put to bed and treated just as after abdominal section, the object being to prevent vomiting and the accumulation of intestinal flatus.—*Phil. Med. News*, Aug. 13, 1892.

**Nash (W. G.) on the Sequel to a Case in which Tuberculous Disease of the Kidney was Treated by Tuberculin Injections.**—In the *Lancet* of June 6, 1891, p. 1260, were published the notes of a case of supposed tuberculous disease of the kidney treated by tuberculin injections at the South Devon Hospital, Plymouth, and a further statement of the case was promised. The following is an account of the case since the man left the hospital. Dr. Torbock, of Polruan, Cornwall, has very kindly seen the man and examined his urine.

On July 11, 1891, the patient wrote: "I have no pain at all on passing urine, do not pass at all by night, nor too frequently by day. I have been working hard since I went home." On May 19, 1892, he wrote:

"I am glad to tell you I am still in good health, only my weight is not increasing. It was 137 lb. when I left the hospital, and is now 133 lb. I have been working hard at farm work every day since I came home. I do not feel any pains in the loins and am free from pain everywhere. I feel as well now as ever I was in my life. I pass my urine very regularly about three or four times a day and once or twice by night. There is no pain on passing urine." Dr. Torbock on May 24, 1892, wrote: "I have examined P——'s urine. Result: Appearance clear and of natural color; sp. gr. 1020; reaction acid; no albumen; no sugar." Again on June 15, 1892, he wrote: "I managed to get hold of P—— yesterday. I consider him a perfect cure; no pain in kidneys, or anywhere else. He looks and feels healthy and strong, eats, drinks, and sleeps well. There are no signs of tuberculous disease anywhere.—*London Lancet*, July 30, 1892.

**Jones (E. L.) on Report of Two Cases of "Hemi-albuminuria."**—On November 19, 1889, I examined for life insurance, Mr. J. C. J——, aged about thirty-five, mechanic; a man of perfect, physical development, good family record, and previous perfect health. Upon testing his urine I was astonished to see a dense white precipitate from nitric acid; proceeding to apply the heat-test, a few drops of acetic acid were added, which also gave a dense white precipitate, and upon heating, each precipitate entirely cleared up. In other respects the urine was normal. Not knowing what I had found, I proceeded to look the subject up, and ascertained that it was first discovered by Dr. Bence Jones in a case of osteo-malacia, and by him named hemialbumin; others have given it different names.

The second case was that of a mulatto, aged thirty-seven, who presented himself on November 26, 1891, on account of a general malaise and lassitude, with headache; urine scanty. Three years before I had treated him under exactly the same circumstances, except as to the presence of hemialbumin. In this case the chemical reactions were the same as in the first case, urine otherwise normal, with no sediment for microscopic examination. He was soon relieved by regulation of diet and mild diuretics. Daily examinations of the urine were made for a week, but no hemialbumin was found except in the first instance.

In searching the literature at my command, I find in several independent authorities allusion to this condition having been observed by Bence Jones and Kuhne, and as no other observations are recorded, I judge its occurrence must be very rare. I do not remember having seen any allusion thereto in a general reading of current medical literature for five years. Whether its occurrence is of any significance or not, is as yet undecided, but judging from my having seen it twice in at most only a few hundred examinations of urine, it must be more common than supposed, in many instances being pronounced albumen from careless testing, which may also explain how it is sometimes so easy to cure "Bright's disease." I know that it is the practice of many good physicians to apply only the nitric-acid test for albumen, and where they get the dense white precipitate they consider it entirely unnecessary to proceed further, when possibly the heat-test would reveal quite another state of affairs. It was to call attention to this practical point that prompted me to report the above observations.—*N. Y. Med. Rev.*, Aug. 6, 1892.

## BOOK NOTICE.

**Annual of the Universal Medical Sciences for 1892.** A yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited by CHARLES E. SAJOUS, M.D., with seventy associate editors and over two hundred collaborators. Five volumes. Philadelphia; F. A. Davis Co. 1892.

The present volumes complete the fifth year of publication of this great work. The rank it has attained has brought it to the notice of every physician and so much has justly been said in its praise that we can here do little more than to chronicle the improvement over preceding issues.

A few changes have been made in the Associate

Staff. Dr. Joseph O. Dwyer, of New York, has accepted the department of "Intubation," and Dr. Simon Baruch, of the same city, that of "Climatology and Balneology," to which has been added a section on "Hydrotherapy."

Presuming that our own personal experience is that of all others who own these twenty-five volumes we frankly say that we could not part with them on any consideration. We find them not only valuable as to their contents but the arrangement of the latter is such that one can easily find what he wants. The present issue is an advance in many ways on its predecessors, and the editor's intention to give next year the address as well as the name of writers quoted is worthy of commendation.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## LEADING ARTICLE.

### THE CHOLERA.

The daily press is giving such full particulars as to the extent of the present epidemic that any remarks on that point here would not be pertinent. The disease does not seem to be manifesting any unusual symptoms and is probably no more severe than it always is. In Russia the pre-existing famine induced by the failure of harvests has reduced the physique of the people to that low ebb which invites the approach of every morbid agent. Out of the misery and death which the present ravages of the disease are causing is likely to come a clearer conception of the power of efficient quarantine and disinfection. We may, therefore, look in the future for a higher standard of municipal and personal watchfulness.

Every one of ordinary intelligence has some vague conception as to how contagious and infectious diseases spread, but few of the laity who have not had personal experience with some sort of epidemic have had an adequate idea of how rapidly zymotic diseases can extend. The present cholera outbreak is likely to give them on this subject some new and sensible ideas from which we hope that mankind at large will be the gainers. Nevertheless it is the duty of the profession to divest this of all mystery and to show that the extension of this class of maladies simply follows the ordinary laws of nature and is amenable thereto. Cholera, endemic in India, spreads along the lines of human travel and calls at exposed ports with almost as much certainty as do the ocean steamers.

Winds carry with them the seeds of new vegetations, and wherever the latter are

lodged on favorable soil they recommence their life history. Just so—food, clothing, and bedding carry the death-laden comma bacilli, and wherever the latter gain a foothold—there they will recommence their growth the minute a favorable environment presents itself. We cannot control the winds. We can only pluck up the poisonous plant by the roots and so prevent it from propagating its own kind. But we can disinfect bedding and clothing. We can avoid certain foods and by cooking destroy any germs which may possibly lurk in other foods which we must have. The control of the cholera therefore is in the hands of mankind, and the disease is not to be regarded as an avenging fury not possibly to be appeased.

The present outbreak brings to mind also the well defined germ character of the disease. We believe that Koch's theory in regard to the comma bacillus will stand the test of the future. It certainly explains much history of the past. It will be recollected that Koch investigated the cause of the outbreaks in Egypt in 1883 and in India and France in 1884. He first determined that the infectious material was not in the blood, and later that it was confined to the intestinal tract. Finally he narrowed down the *materies morbi* to a comma bacillus from one half to two thirds as long as the tubercle bacillus, but much more bulky, thicker, and slightly curved.

In artificial cultures it is found that while the bacilli grow in threads, the latter are not long and straight as in anthrax, but are long and delicate spirals—somewhat resembling morphologically the spirochæte

of relapsing fever. They will grow in meat broths and in milk. The appearance of the latter is not changed. It is not curdled, and there is no precipitation of the casein. Blood serum and food-gelatine also furnish suitable pabulum. When the colony of a culture experiment is young it looks like a pale and tiny drop, with an irregular border and somewhat granular appearance, which eventually becomes strongly refracting. The gelatine liquefies about the colony, which consequently tends to sink more deeply into the nutrient matrix. There is thus formed a funnel-shaped cavity in the midst of which the colony appears as a whitish point. The bacilli also grow on boiled potatoes—coloring the infected surface a light grayish brown.

The comma bacilli flourish best at temperatures ranging between 86° and 104° F., growth seems to cease at 60° F. A temperature of 14° F. will of course freeze them, but on being thawed out and brought up above 60° F. they will at once recommence their growth. They must have air. The growth is rapid, increasing in an extraordinary manner for the first twenty-four hours. After two or three days they begin to die off in culture preparations, and other bacteria mixed in with them begin to increase.

Another important point was developed by Koch's experiments bearing directly on therapeutics. The reaction of all the nutrient media must be alkaline. An acid reaction in general hinders and even stops development. It is found that some acids are not thus hurtful to the germ growth.

The mineral acids are all believed to have this antiseptic effect, as also iodine, alcohol, alum (1-100), camphor (1-300), carbolic acid (1-400), quinine (1-5000), and corrosive sublimate (1-100,000). But here, as is so often the case, if we endeavor to calculate just how much, of these substances is necessary to kill off all the germs in the human bowel, we arrive at a quantity far beyond the limits of therapeutic safety.

In Koch's original paper on this subject he took a very conservative view of the pathogenic character of this organism, yet one which we believe is currently accepted to-day. This much has to be admitted with reference to all germ diseases, that there must exist in the exposed individual a predisposition thereto. Exactly what this systemic state is we do not know, though we are well aware of certain causes, such as privation, bad hygiene, etc., which contribute directly to its existence. We also know that the crowding of the sick will not only lessen the resistance-power of each individual, but that it will also increase the virulence of the pathogenic factor.

Concerning therapeutics, there is a wide variation of opinion. The present epidemic on the continent does not seem to have caused any new ideas to arise concerning drug treatment. The rectal injection of warm saline solutions is undoubtedly of great service. To regard the disease as one needing considerable stimulation is necessary. If anti-diarrhoeal remedies can be retained by the stomach, a mixture of Magendie's solution and one of the mineral acids will undoubtedly go as far as any toward the promotion of recovery.

## EXTRACTS FROM RECENT FOREIGN LITERATURE.

BY ALEXANDER H. TRAVIS, M.D.

**Cenas, on Primary Suppurative Myocarditis.**—Primary abscess of the myocardium, as distinguished from abscesses occurring in the course of pyæmia or ulcerative endocarditis, has been seldom observed. The distinction between suppurative myocarditis, consecutive to ulcerative endocarditis or pyæmia, and acute primary endocarditis is of some importance as regards prognosis. In the latter condition, recovery is possible, at least for a time when the inflammation of the myocardium is of slight extent, the general in-

fection not severe, and the abscess is so deeply situated in the wall of the ventricle that rupture of the wall of the heart is prevented. The author reports a case observed in a young man, aged eighteen years. The patient was poorly nourished; his previous history was negative. He entered the hospital on the tenth day of the disease, which had been diagnosed as typhoid fever. The symptoms were stupor, no delirium, dyspnoea, pulse dicrotic, 120; temperature 103.2°. Abdomen was not distended, no rose spots, no gurgling, no

iliac tenderness, or diarrhœa. Tongue thickly coated. Lungs negative. Condition remained stationary four days. Then complaint was made of dull pain in right thigh, the crural vein was found to be a little prominent, a little tender—no œdema. Pulse very dicrotic, 125. A soft systolic murmur at cardiac apex, extending toward sternum. Diagnosis: typhoid endo-myocarditis. The next day symptoms appeared in the left thigh similar to those in the right. The next day, induration of the veins of the arms. Eruption of vesicopustules over left elbow and wrist. Pulse, 130-140 per minute. A little diarrhœa and abdominal distension. Superficial abscesses appeared in several places. No articular lesions. Stupor and dyspnœa increased. Death on the twenty-second day of the disease. In the heart there was an old endocarditis affecting the free border of one of the tricuspid valves. The other valves normal. In the interventricular septum was an irregular cavity of the size of a five franc piece, containing a little thick, grumous pus mingled with sphacelated muscular tissue and communicating with the left and right ventricles by small openings. No other abscess cavity in the walls of the heart. Sero-purulent exudation in the pericardium. Purulent non-obliterating clots in each iliac vein. Peyer's patches lightly congested; not ulcerated. Liver, spleen, and kidneys, congested but presenting no infarcts.—*Loire Médicale*, May 15, 1892.

**Leyden (E.) on the Treatment of Locomotor Ataxia.**—After insisting, at some length, that the scientific therapy of a disease is not limited to the treatment of the disease itself—the anatomical lesion—but includes all that may improve the patient's condition, L. reviews the various methods of treating locomotor ataxia, estimating their value from his own experience. No form of treatment can effect retrogression of the anatomical process, and there is no probability that any treatment which can do so will be forthcoming. This does not imply, however, that the application of such methods of treatment should be always opposed in practice. No drugs possess a specific influence over the disease. Potassium iodide has been recommended by the author as diminishing pain—not as a specific. The author denies absolutely any influence of syphilis in the causation of the disease. The increase in

the number of supporters of the syphilitic theory, he believes, is due to the fact that the theory is convenient in practice. He refuses to criticise statistics as he has but little respect for them. The second objection to the theory, is the unsuccessful results obtained by antisyphilitic therapy. He has never obtained any success with the use of mercury or potassium iodide. Many cases said to have been cured by mercurial treatment were, in reality, cases of neuritis. The third objection is, that the anatomical lesions of tabes bear no resemblance to the tertiary syphilitic lesions in the nervous system. If a patient, however, desires to go through with an antisyphilitic course of treatment, he does not object. Brief and sarcastic reference is made to Constantin Paul's treatment with injections of the gray substance of sheep's brains.

Excellent results are observed from courses of treatment at the various mineral springs. Cold baths and compresses, employed with discretion, are also useful. The latter are often valuable in relieving the attacks of lancinating pains.

Electricity continues, notwithstanding all criticisms, to be an indispensable therapeutic agent in the treatment of this disease. Its therapeutic value is not confined to influence on local processes; it may be used in most varied ways for the patient's benefit. Excitation of sensory nerves is rational and promises some improvement. Careful electrical treatment of muscles and motor nerves is also rational, although offering less of hope. Finally the influence of electrical treatment on the patient himself is extraordinary; it makes a strong impression on him, procures his confidence, and arouses his hope.

Massage, aside from its suggestive influence, is without effect. Surgical and mechanical treatment, as exemplified in nerve-stretching and suspension, are not regarded with favor. The most attractive method of suspension, Motschutskowski's, although promising no decided success, is not, when employed with proper precautions, injurious. Orthopædic treatment is sometimes serviceable.

The best results are obtained by a combination of gymnastics, electricity, and hygienic and dietic measures, the whole constituting a compensatory therapy. The object of treatment is compensation of the especial symptoms of the disease—

ataxia. The ataxia depends not only on anæsthesia, and is improved by improvement in sensation, but on two other factors—sight and muscular strength. As the true extent of the ataxia first appears when the eyes are closed, so it is diminished when the patient watches attentively his movements. The stronger the muscles are, and the greater the energy of will, the less apparent is the ataxia. The main objects of treatment are, to train the patient to give attention to his movements, and to strengthen the muscles. Everything which will increase the patient's strength, energy, and hope must be employed. Exercise with the apparatus devised by Fraenkel, abundant nourishing food, "cures" at springs, electricity, amusements, etc., are all valuable elements of the treatment. Psychical influences form an important part, as the course of treatment is laborious and tedious. Success in each case depends largely on the patient's character and environment.

Treatment of the neuralgic pains and intestinal crisis is difficult and unsatisfactory. Usually, patients are advised to employ the measures they have themselves found most serviceable against neuralgias—lotions, compresses, massage, etc. Opium, chloral, sulphonal, and the newer anti-neuralgics are of little use, and should be avoided if possible. Treatment of intestinal crisis is especially difficult. Morphine soon ceases to have effect. The crises soon affect the patient's nutrition. Careful and energetic nourishment in the intervals is therefore important. Sometimes the attacks have diminished as the patient's strength increased—*Berlin. klin. Wochenschr.*, Nos. 17 and 18, 1892.

**Fenwick (W. S.) on Dangers of Washing out the Stomach.**—Washing out the stomach is absolutely invaluable when employed in a rational way, but it is not altogether devoid of danger. 1. The operation is sometimes followed by nervous symptoms of some severity. In cases of pronounced hysteria the passage of the tube may be accompanied by an attack of convulsions. The most interesting nervous phenomena are those in which the symptoms resemble tetany. Bouveret and Devic have recently cited twenty-three cases, including two of their own. F. has found the records of two additional cases. There may be three distinct forms as regards clinical symptoms, simple rigidity of the mus-

cles of the extremities, tetanic convulsions, or true epileptic seizures. The three varieties may exist either separately or in combination, the more complex the case the greater being the danger to life. Death usually occurs either from coma or from failure of the respiratory centre, and may supervene within a few hours of the initial symptoms or be postponed for several days. Seventy-two per cent of the cases terminated fatally.

2. It happens, not frequently, especially when the operation is performed for the first time, that the patient is seized with a sensation of giddiness, or faintness, and the tube has consequently to be withdrawn. Such symptoms are seldom of any moment, and probably arise either from simple nervous excitement or from the fear of being choked. But we may also observe during the later stages of the operation, that similar phenomena are apt to develop themselves as a direct result of any sudden alteration in the intra-abdominal pressure. It is a well-known fact that paracentesis of the abdomen is occasionally followed by symptoms of shock, and it is therefore not unnatural to believe that the rapid removal of the contents of a dilated stomach or the introduction into it of a large quantity of additional fluid, may sometimes be accompanied by signs of cardiac failure, especially as in such cases the patient is already in an advanced state of exhaustion. The case of a gentleman, aged fifty-three attacked with symptoms of organic affection of the stomach, is cited. The disease was accompanied by rapid loss of flesh and strength. For a short time the stomach was washed out daily. Several weeks later the tube was again introduced and about a pint and a half of sour fluid was rapidly withdrawn, when, without any warning, the patient fell backward dead. There was cancer of the stomach and the heart muscles showed marked signs of fatty degeneration.

3. It is generally admitted that acute gastric ulcer constitutes a contra-indication to the use of the stomach douche. But cases of latent gastric ulcer are by no means uncommon, and in these cases the adoption of lavage will be attended by great danger to life. The author describes a case which he believes to be unique. A female aged twenty-five had suffered several months with symptoms of ordinary atonic dyspepsia. After a while it was decided to wash out the stomach. Little fluid was employed and



the stomach was not unduly distended. Toward the end of the operation, violent vomiting and increase of epigastric pain came on. Acute peritonitis developed. A gastric ulcer had perforated into the peritoneal cavity. The mere passage of a tube may prove dangerous, in such cases, from the readiness with which it excites the act of vomiting. In this connection the author recalls the case of a drunken man in which the vomiting produced by a hypodermic injection of apomorphine ruptured the adhesions of an old gastric ulcer to the liver. The fashion of using a gastric catheter to investigate the chemical contents of the stomach in cases of acute gastric ulcer, is useless and mischievous; for the knowledge so obtained is of little value in treatment.

4. Hæmorrhage is apt to follow aspiration of the stomach by the stomach-pump, but dangerous bleeding accompanying the use of the siphon has never been recorded. The accident does, however, occur sometimes. A case of gastric cancer is described, in which lavage was attempted. After removing two pints of sour-smelling fluid, the stream became tinged with blood, and in a few seconds what appeared to be almost pure blood poured out of the funnel. The patient became pale and faint, and death was feared. A large quantity of bright blood was vomited. Several days later the operation was successfully performed.

5. The use of stomach-pumps and bougies is attended with considerable liability to injury of the mucous lining of the œsophagus and stomach. It occasionally happens that the mere contact of the hard point of the tube with the surface of a stomach softened by disease produces wounds. If the attempt to pass a pliable tube has failed, it is therefore safer to desist rather than run the risk of injuring the œsophagus.

6. Considerable caution is required in selecting an antiseptic fluid for the purposes of lavage. Three cases are recorded in which the use of boracic acid was followed by serious symptoms, two ending fatally. Warm water either alone or containing a small quantity of sodic carbonate is usually sufficient; if more energetic measures are indicated, naphthol or resorcin may be used. In some persons even these substances produce unpleasant effects. Care should be taken that no quantity of the injection is

left behind in the stomach.—*Practitioner*, April, 1892.

**Hoppe-Seyler (G.) on Stomach Fermentation.**—Gases from the stomach have seldom been examined, and then only such as were evacuated by eructation, or by fermentation of material previously removed from the stomach. By means of a simple apparatus gas was removed from the stomach and analyzed. In the bottom of an inverted Wouff's bottle filled with water, through which the fluid removed from the stomach passed, the gases were collected; thence they were removed through a glass tube and analyzed by Hempel's method. Fifty-five analyses were made in nineteen cases of disease of the stomach.

In eleven cases of dilatation of the stomach large quantities of hydrogen (7.64 per cent.) and carbonic acid (19.58 per cent.), besides varying quantities of oxygen and nitrogen (from swallowed air), were found. The presence of such gases is no great rarity. In three of the cases there was stricture of the pylorus following gastric ulcer; in ten cases probably, and in four certainly, carcinoma of the pylorus was present.

The hydrogen is chiefly produced by the so-called butyric acid fermentation. The presence of hydrochloric acid even up to 0.2 per cent. does not prevent this fermentation. In the absence of hydrochloric acid a larger quantity of carbonic acid gas was produced by the action of *torula cerevisiæ*.

In six cases no hydrogen was found. These were cases (of dilatation of stomach) with and without carcinoma, and cases without dilatation. In them was found mostly air, the oxygen partly absorbed with varying quantities of carbon dioxide. By this method in a comparatively short time, a decision can be reached as to whether gas filling a stomach arises from fermentation or swallowed air.—*Prager med. Wochensh*, May 11, 1892.

**Ewald (C. A.) on the Diagnosis and Treatment of Diseases of the Digestive Tract.**—In carcinoma of the stomach, chronic gastric catarrh, atrophy of the mucous membrane, and in conditions of severe nervous depression, the secretion of hydrochloric acid may be either completely suppressed or be diminished to a greater or less extent. The absence of free hydrochloric acid, with or without diminution of hydrochloric acid in

loose combination with proteids, during the process of gastric digestion is, therefore, of no value for the purpose of differential diagnosis. Atrophy of the gastric mucous membrane occurs usually as the result of chronic gastric catarrh, and, as a rule, appears in elderly persons. Sufficient observations have shown that it does occur in youthful persons; its etiology in such cases is not clear. As the clinical picture may closely resemble that of carcinoma of the stomach or of neurotic conditions, the diagnosis is difficult. The condition may be differentiated from carcinoma by the absence of severe attacks of pain and vomiting, particularly of blood; from catarrhal affections, by deficiency of mucus in the contents of the stomach. The gradual advance of the symptoms, as compared with the paroxysmal appearance of the neuroses, and the usual connection of the latter with the symptoms of a general disease of the nervous system (hysteria, neurasthenia, spinal irritation, etc.), may be noticed in differentiating the disease from neurosis of the stomach, but there are no diagnostic points. It should not be forgotten that carcinoma of the stomach, particularly in females, may for months or years assume the form of an obstinate neurosis until an intercurrent fever or mental excitement is succeeded by sudden aggravation of symptoms and the rapid growth of a previously latent tumor. A case which has been under observation two and a half years and the probable diagnosis of which appears to be atrophy of the mucous membrane of the stomach is described. Although there is entire absence of peptic processes in the stomach, the patient now enjoys perfect health and has gained considerably in weight. The only explanation of this favorable result is that digestion is performed in the intestinal canal. A necessary condition for this is the prompt passage of the contents of the stomach into the intestines. Even in marked disturbance of the digestive function of the stomach little is to be feared as long as the muscular activity of the stomach persists. As the muscles of the stomach become incompetent, there result decomposition of food from stagnation and relaxation and dilatation of the stomach. Treatment must be directed towards increasing the strength of the muscles of the stomach and the prevention of decomposition.

Atonic conditions of the intestinal muscles may follow or accompany the stomach changes, with decomposition of the contents of the intestines, resulting in the production of large quantities of gas, or of irritant products which lead to chronic catarrh of the intestines and its attendant symptoms. The indications for treatment are the same as for the stomach affection. Internal remedies designed to increase the movement of the stomach and intestines—strychnine, belladonna, physostigma—are valuable in temporary disturbances, but soon cease to have effect after continued use. Gymnastics, riding, swimming, and out-door sports generally, have an undeniable effect on the action of the intestinal muscles. Massage in any form simply produces pressure on the organ lying beneath; the organ is roused to increased activity only in so far as the circulation in it is improved. Internal faradization of the stomach undoubtedly influences the muscles of the stomach as it does muscles elsewhere. The author is very well satisfied with the results of the use of internal faradization. In addition, faradization of the stomach produces a decided sedative effect in nervous hyperæsthesia of the stomach.

For the disinfection of the intestinal tract the most useful preparations are: salicylate of bismuth, resorcin, and benzo-naphthol, a substance almost odorless and tasteless, which passes through the stomach unchanged, and is separated in the intestine into beta-naphthol and benzoic acid. The two last-named drugs are especially recommended. Benzo-naphthol appears to be a useful and efficacious remedy for internal use; it is said to have a stronger antiseptic influence than resorcin or salol, and there is no danger of carbolic acid intoxication from the prolonged use of it. The improvement in subjective and objective symptoms after prolonged use of benzo-naphthol in doses of 30-75 grains *per diem*, in divided doses, is often remarkable. Recently, E. has been accustomed to prescribe a mixture of equal parts of benzo-naphthol, bismuth salicylate, and resorcin, in frequent small doses. In a very few cases benzo-naphthol was not well borne. Rectal applications are in most instances unnecessary, as the trouble is located in the small intestine.—*Berliner klin. Wochens.*, June 27 and July 4, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY HENRY L. SHIVELY, M.D.

**Magitat on "Menton de Galoche."**

—Under this name the author describes a deformity consisting of a projection forward of the lower incisor teeth and jaw beyond the upper, in extreme cases the chin being carried sufficiently far forward to be in line with the tip of the nose. The face in profile thus approaches the senile type, constituting a vicious deformity, which in the female is peculiarly conspicuous. The condition is hereditary in some families, and appears to be due to a premature fusion and ossification of the intermaxillary bone, which results in an arrest of development of the upper jaw. The inferior maxilla develops normally, and gradually advances to project beyond its fellow. The deformity may exist from birth, but is usually most noticeable about the seventh or eighth year at the period of second dentition.

The treatment is very satisfactory and in patients below adult age results in complete and speedy relief of the deformity. A vulcanite plate is moulded accurately to the teeth of the lower jaw and in its upper surface is embedded an inclined plane of gold or platinum, so arranged that the upper incisors impinging upon it are directed strongly forward. The plate is worn constantly day and night. As the teeth are carried forward, the alveolar process of the upper jaw advances with them, and the line of the upper lip is made to correspond with that of the lower. The author reports a pronounced case cured by this method in eleven days, and concludes as follows:

1. The facial deformity known as "menton de galoche" is susceptible of a complete cure by orthopædic treatment.
2. The apparatus to be used is the inclined plane first described by Catelan in 1809.
3. Its application is attended by no discomfort or complications.
4. The duration of treatment is proportional to the youth of the patient and the muscular energy employed.

The limit of the utility of the apparatus, without being definitely fixed, seems to correspond to adult age in the patient.—*Gazette des Hôpitaux*, May 24, 1892.

**Wilson (H. A.) on the Necessity for Early Correction in Congenital Club-Foot.**—I believe that it is clearly proven that the earliest moment at which you correct the deformed foot, the more satisfactory will be the ultimate result. This ultimate result, however, depends upon the completeness of the first correction, and, as well, upon the efficiency of the maintenance of the corrected position and the establishment of correlation of muscular forces. Relapses are the inevitable result of inefficiency on the part of those having the care or direction of the institution of remedial measures, and one of the prominent factors in these cases, I have found to be incomplete early correction.

The incompleteness of the early correction depended, in some instances, upon the late period at which correction was attempted, for I am abundantly satisfied that the best ultimate results I have had, have been in cases where complete correction was accomplished in the first month, and persistent efforts maintained. In many of these cases I have found an entire absence of those signs of muscle atrophy which are so conspicuous in, I believe I am right in saying, neglected cases. Now, shall we take a child at the age of one month, or less, and divide the tendons or other contracted soft tissues, or shall we confine our efforts entirely to manipulation and the employment of restraining apparatus until a later period in the child's life? I know that there are those who advocate postponing operation until a later period, since in some cases manipulation alone will apparently elongate the contracted tendons. While it is improper to say that in all cases operative procedure should be resorted to, I firmly believe that this rule should be adopted, and, without exception, the complete correction should be accomplished by the employment of every rational means, let it be operative, mechanical, manipulative, or gymnastic, but it must be complete to be effective.

The length of time required to accomplish a full and complete correction of a congenital club-foot is the same as that required to form the foot of a normal child. Not until a child is ten or twelve years old

does a foot possess the normal mechanical conditions necessary for its full usefulness. All babies are flat-footed, many are naturally pigeon-toed, but all of these conditions pass off where there is a natural tendency to do so.

The same thing may be said of a child born with a club-foot, certainly in the milder forms, that, until the age of ten or twelve years, the correction must be maintained mechanically, and efforts must constantly be made to develop the muscular system.—*The Times and Register*, June 11, 1892.

**Powers (C. A.) on the Treatment of Spino-Bifida by Excision.**—In the case reported a meningocele four and a half centimetres in diameter was present a little to the right of the median line, opposite the last lumbar vertebræ. The tumor had existed from birth, and at twenty-eight years of age the patient gradually began to lose power in the legs. The heels dragged, and there was a dull, aching pain and soreness about the hips, extending down the back of the thigh, this being worse on sitting. Occasionally he had sharp pains in the loins, hips, and knees, sufficiently severe to throw him down. These came on at irregular intervals, perhaps once a month. Obstinate constipation, occasional attacks of urinary incontinence, at times difficulty in commencing micturition. Later, weakness invaded the arms, abnormal sensations developed, and he had diplopia at a distance. The gait became ataxic and paralytic, and the reflexes were abolished. On ophthalmoscopic examination veins of the right fundus were dilated, and in the left the optic nerves presented a whitish, atrophied appearance.

Temporary improvement in the ataxic symptoms followed ligation and excision of the tumor. From an analysis of thirty-four cases treated by this method the author's conclusions are as follows:

In simple meningocele one may remove the tumor, suture together the serous surfaces at the neck of the sac, and close the wound. Under suitable conditions such procedure should not be attended by very great risk, all possible precautions being taken to prevent subsequent "leakage." If the case be one of meningo-myelocele, one may cut off nerves which terminate in the sac, or endeavor to loosen and replace within the spinal canal those which cause it.

The treatment by excision must certainly be thought the most rational, the most scientific. Improvement will follow more careful selection of cases, the choice of an appropriate time for operation, and added knowledge in technique. The results thus far attained are certainly encouraging, and lead to the belief that the operation is one which will find added favor in the future.—*N. Y. Medical Record*, July 16, 1892.

**Weir (R. F.) on an Unique Derangement of the Knee-Joint Demanding Surgical Interference.**—Two cases are reported in which the following symptoms existed: Grating and rubbing sensations in the joint, pain, swelling, slight stiffness, and a tendency to trip or fall in walking. On examination a peculiar jumping movement could be seen and felt when the fingers rested lightly upon the patella and the leg was carried forward in extension. With this jumping or over-riding there was increased inability to flex the limb after it had been brought into a fully extended position. If the limb was kept rigidly extended in mid air it could not be flexed without great pain. When the resistance was forcibly overcome, the jumping sensation was felt to the outer side of the patella. There was also considerable difficulty, when the limb was flexed, in bringing it to the position of extreme extension. On gently pushing the patella upward or crowding it against the femur there was felt a sudden over-riding, as from the interposition of some abnormal membrane or tissue. As this was above the line of the joint, dislocation of the semilunar cartilages could be excluded. Upon opening and exploring the joint, in one case, there was found on the inner aspect of the patella a bluish-white duplicature of the synovial membrane, which hung down nearly half an inch between the patella and the reticular surface of the femur, in such a way as to be caught or nipped in active flexion of the joint. In the second case a similar fold was found on the opposed surface of the femur. In both cases the duplicatures were removed with forceps and scissors, and a good recovery ensued with satisfactory motion in the joint.—*N. Y. Medical Record*, July 16, 1892.

**Little (E. Muirhead) on the Treatment of Abscesses in Pott's Disease of the Spine.**—Spontaneous cure is the end of the majority of vertebral abscesses, if we include those which give no external

sign of their presence. Expectant or, as it may be called, passive treatment should always be tried and persisted in as long as an abscess is not rapidly increasing or showing a disposition to point, and not a few chronic cases will do well under this treatment. It must be remembered that psoas and, in a less degree, lumbar and iliac abscesses differ in many circumstances from those in other parts of the body and those from other causes, and cannot often be dealt with according to the general rules of surgery. In the first place the sac cannot freely be laid open nor the tissue lining it be safely completely excised. The channel communicating with the focus of disease is a long one and often tortuous, and there are often diverticular and other sacs communicating with that, which is apparent externally by perhaps minute openings. Add to this the neighborhood of important structures, and the difficulties in the way of radical treatment are at once appreciable. In some cases when an abscess has existed for a long time it may have become cut off from its original source and be nothing more than a localized collection of pus, which is easily cured by incision. Aspiration will only remove the serous or more fluid parts of the contents, leaving the cheesy or curdy masses, which are more important, behind, and even evacuation of the fluid by aspiration may be hindered by the blocking of the needle by flakes of lymph or curdy masses. Aspiration, however, will, by reducing tension, put off the evil day of rupture. With antiseptic precautions, simple incision, repeated if needed, is to be preferred to aspiration. Injection with iodoform glycerine or iodoform and ether is a means of treatment that has lately found favor in Germany—from thirty to one hundred grammes (seven to twenty-five ounces) of a ten per cent. solution being injected through an aspirator needle, the abscess having previously been emptied. Bruns claims fifty cures in fifty-four cases, and the treatment appears certainly worthy of trial. Iodoform poisoning is stated not to have been hitherto observed. For retro-pharyngeal or retro-oesophageal abscess, incision is the best treatment, on account either of accessibility or danger to life. In lumbar abscess incision is more useful than in psoas abscess, as the sac is likely to be less extensive and complicated, and drainage is here much more complete. Lumbar incision may also be advanta-

geously practised in abscess pointing in the groin, an incision being made at the outer side of the transverse processes of the vertebræ in the loin, through the fibres of the quadratus lumborum. Pressure on the abdomen and groin will cause bulging of the sac, which may then be proved by an aspirator or grooved needle, and then freely opened; if easily accessible the carious vertebræ may at the same time be attacked and scraped.—*Lancet*, July 23, 1892.

**Poore (Charles T.) on Excision of the Knee-Joint.**—In a general way, it may be stated that excision of the knee-joint is called for under two conditions: 1. Disease in the articulation. 2. For deformity, either with or without disease. In the former the point of section of the bone is not as arbitrary a one as with the latter class of cases; it is absolutely necessary, in cases of deformity, to remove enough bone from the tibia and femur to allow the leg to be brought into a proper position, no matter what may be the pathological condition of these structures.

The obstacle to the accomplishment of this is not alone the contraction of the posterior group of muscles of the thigh, but the thickening and shortening of the connective tissue behind the joint. This can not be elongated, and it is necessary that there should be no compression of the vessels; and enough bone must be removed to relieve all tension behind the joint, and not simply enough to permit of the cut ends of the bone being forced into coaptation. Hence operations for the correction of deformities are often followed by more shortening than operation for disease.

**Treatment of Abscess Cavities.**—Formerly it was considered necessary to remove by section all diseased points, and this was done in the earlier cases. Now all abscess cavities, with caseous masses, are thoroughly curetted and disinfected. If a sinus in the bone exists, it is followed to its termination and its walls scraped. If an abscess cavity of any size is opened into, in some cases it has been drained through a separate channel—an opening being made in the shaft. Several times such a cavity has been stuffed with decalcified bone without any special drainage, and the result has been very satisfactory. If any sinuses exist in the soft part, they have been dissected out and their edges sutured.

The patella has been generally removed;

in a few cases in which it has been left, it has given trouble, and a second operation was made necessary.

*Suturing of the Ends of the Bone.*—Until within the last year the ends of the bone were fastened together either with silver wire or nails. When wire has been used, it has been passed from either condyle of the femur, so as to come out well behind on the cut surface of that bone, then into the tibia at a point corresponding to its exit on the cut surface of the femur, and then brought out on the surface of the shaft, an inch or more from the point of section. The two ends were then twisted. In this way the bones were certainly held together, and it made it easier to apply the necessary dressings. But more or less trouble has always followed their use, sometimes a limited necrosis. In other cases, although the bone was not involved, there was more or less suppuration; while again, though they caused no suppuration, the patient complained of their presence, and they had to be removed, for which ether was required.

Nails have some points of advantage over wires. They are more easily inserted, and their removal is readily accomplished without the use of an anæsthetic. But it has been found that suppuration has frequently been set up in their tracks. It has, however, been always confined to the soft part. It is probably due to skin infection, as the nails have been disinfected by heating them in a lamp before their use, and the suppuration would seem to be due to the same cause as stitch abscess. It is almost impossible to thoroughly cleanse the skin in many cases of disease of the knee-joint. I have never met with any trouble in the bone from their use. In dressing a joint in which nails have been used, the patient complains of much pain when anything comes against them. It is certainly better to do without either wire or nails. In my earlier cases a plaster-of-Paris splint, extending from the toes to the groin, was used, going over the dressings, fortified with iron straps, and bent to pass around the seat of operation, fenestra being cut out on the following day. Later a posterior splint was used, and over this plaster-of-Paris. Both of these methods have been found not altogether satisfactory. It is difficult to fit an iron splint perfectly; there is less room for the application of the dressings. Again, a plaster-of-Paris splint soon

gets loose, it is liable to get soiled, and its reapplication is often required.

*Dressings.*—The wound having been thoroughly douched with mercuric solution (1 to 1,000), and all bleeding points of any size ligated, if the cut ends of the bones are placed in position, if nails or wire are used, they are now put in position, and the limb placed on a posterior splint, if it is to be put up in this manner. The edges of the incision are united with catgut sutures, except at the posterior limit of the incision; this is left open for the purpose of drainage. Iodoform has been freely used within the wound. Over the line of incision a strip of iodoform gauze is placed, and over this an ample dressing of bichloride gauze, and then a snugly applied bandage, extending from the foot to the groin.

*Drainage.*—Until within a year rubber drainage-tubes have been used. In my earlier cases the idea was that the greater the number used the more perfect would be the drainage, and the better for the patient. Experience has taught the reverse, and their number has been gradually reduced, until now they are seldom used. It was found that often their point of entrance was the seat of unhealthy-looking granulations, that it sometimes became the source of a limited infection, they seemed to keep up irritation, and their tract was slow in closing. For these reasons of late they have not been used. It has been found that if the parts are properly dressed and the bandage snugly applied, the amount of oozing will be comparatively slight, and can be taken care of by other means. In suturing the wound, its most dependent (posterior) point is left open; between the edges of the incision in this position are placed several layers of iodoform gauze, and passing into the posterior part of the joint, and this has been found to act as a sufficient drain.

The present way of dressing the limb is as follows: The Esmarch bandage is removed long enough to permit of the ligation of any bleeding points, and is then reapplied. After suturing the wound and providing for drainage, the bones are held in position by an assistant, and pieces of bichloride gauze are placed around the limb at the seat of operation, and also extending well up and down it, so as to form a thick, fusiform mass. This is tightly and evenly bandaged, beginning at the foot and extending to the groin. Over this three thin splints are

tightly secured, one extending from a point as high up as possible to below the foot, the other two laterally, the inequalities left by the dressing being filled with cotton, care being taken that the posterior splint is well padded below, so that there shall be no sagging down of the leg. The Esmarch bandage is then removed. When the patient is returned to bed the limb is slung for twenty-four hours, and then placed flat on the bed. In the last case treated this

way, the first dressing was not removed for ten days. The advantage of this method seems to be that there is less oozing, less frequent dressings, and much more comfort to the patient. With the posterior iron splint, in my experience, much more frequent dressings were required, and the oozing for the twenty-four hours was very much greater. After the skin wound is closed the limb is put up in plaster-of-Paris. —*N. Y. Med. Jour.*, July 16, 1892.

## REPORT ON OBSTETRICS.

BY ELIZABETH ADAMS, M.D.

**Pinard (A.). Clinical Lecture on Symphysiotomy; Notes by Dr. T. Lenni.**—As to the different methods in contracted pelvis the French incline to the basiotrite. In 40 cases of basiotripsia on the living child 40 women were saved, 40 infants sacrificed. Cæsarean section performed upon 28 healthy women, reported by Leopold (1890): women cured 25, deaths 3; infants saved, 28. Morisani of Naples reports 12 cases treated by symphysiotomy: 12 mothers recovered and 11 children saved. Operation: a simple bistoury, with a short and solid blade, rather thin, will answer in most cases; the symphysis can be divided without danger of wounding either the peritoneum or the bladder. All antiseptic precautions having been taken, I should place the woman in the dorsal decubitus on the border of a bed, low enough to see clearly the central line to be incised. I should stand close to the patient, and, having shaved the part and marked the median line with a blackened string, I should incise the skin along this line, going through the prepubic fat with care, holding the bistoury inclined, and following the median vertical level. An incision of from 8 to 10 centimetres would do, which should fall close to the clitoris, and slightly deviate here, so as not to wound that organ or its blood-vessels. I should then separate the rectus abdominalis muscle in the superior part of the wound, to allow my finger to enter into the prevesical cavity and protect the bladder and feel for the border of the pelvis. Then, having again taken the middle line, I should incise the symphysis by several passes of the bistoury, going from above downward. If I can judge from operations

on the cadaver, when the symphysis is cut the pubis will open itself; if not, I should have two aids draw the thighs apart. I should keep the subpubic ligament for the last, and only cut it if I could not force it apart with my finger; nor would I stop until I could pass my finger between the articulating surfaces of the symphysis pubis with ease; and even then, before performing any obstetrical operation, I should assure myself by a careful abduction of the thighs that the section was completed. Having assured myself that the pubis on both sides was free, I should make an antiseptic temporary dressing and become again an accoucheur.

Consolidation within a month after the operation is the rule. During the cure some apparatus should be employed to immobilize the pelvis—plaster bandage or belt.

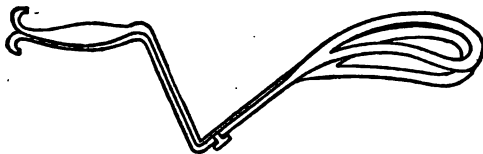
This operation was first suggested by M. Sigault in 1768, and has been performed several times by physicians in Naples. Prof. Pinard says:

Taking the antiseptic methods of to-day, and the better knowledge we have of deformed pelvis, and guided by the certainty of our modern methods of exploration, aided by good surgery, I think that symphysiotomy should be reinstated.—*Internat. Med. Mag.*, July, 1892.

**Thompson (J. M.) on a Case of Complete Inertia-Uteri at Full Term; Labor Induced by Abdominal Pressure.**—The patient, a weak, nervous woman, considered herself in labor for six days—probably somewhat overdue. Stomach intolerant; two previous labors uneventful. At the fourth hour position normal, cervix soft, and sufficiently dilated

to admit two finger-tips. At the tenth hour no progress made, patient weak, vomiting, and nervous. Decided upon abdominal pressure to assist contractions. With my left index finger in the os, in order to determine the efficiency of my method, and my right hand spread over the fundus, I began to make firm and steady pressure in a downward and forward direction. To my delight I found that the os began to dilate and that the external force produced a natural contraction of the uterus, for I observed that upon removing my hand the pain and contraction continued. This procedure was kept up at intervals of from five to ten minutes according to circumstances, when soon "the waters broke" and I could feel the perineum distend. By this time very little abdominal pressure was required to promote contractions, which, by seven o'clock in the evening, were efficient enough to produce a healthy, well-nourished male child weighing eight and three quarters pounds.—*Boston Med. and Surg. Jour.*, July 16, 1892.

**Deweese (W. B.) on New Axis-Traction Obstetric Forceps.**—The new feature is the construction of the perineal curve and providing the same in the axis-traction handles.



**Dimensions:** Length of forceps, 16 inches. Length from lock to tips of blades, 9 inches. Length from lock to perineal curve, 1 inch. Length of perineal curve, 5 inches. Length of axis-traction handles, 5 inches. Average width of blades,  $1\frac{1}{2}$  inches. Greatest width between blades when closed,  $2\frac{1}{2}$  inches. Width between tips of blades when closed,  $\frac{1}{2}$  inch. Weight, 20 ounces.

It is claimed for this instrument that the axis of the blades is constantly parallel with the parturient canal,—hence delivery with a minimum amount of force. That the head may be seized more advantageously at the brim, patient should be placed in left lateral (English) position.—*Four. of Am. Med. Association*, July 9, 1892.

**Mosher (G. C.) on the Management of Lingering Labor.**—The author's rule is to use chloral by rectal injection, if no

contra-indication. In primiparæ with good classical pains in the beginning, which finally become irregular, inefficient, and nervous, os rigid, hypodermic of morphine with small dose of atropia is indicated. Later chloroform may be given. The following incident is related of Dr. M. Cameron of Edinburgh: He had left with a patient two vials, one containing laudanum, the other fluid extract of ergot, and the nurse had given the laudanum at regular intervals instead of the ergot as directed. This, by quieting the nervous system, brought on good labor and a case that he had expected to continue for a long time was brought to a close in three hours. Since then it was his plan to carry a bottle of two-grain opium pills in his pocket, and upon being called to a case of labor he gave his pills at two hours' intervals with the assurance that the case would be soon over or he could go home and get an all night's rest as far as that particular patient was concerned.—*Four. Am. Med. Assoc.*, July 9, 1892.

**Duff (J. M.) on the Routine Practice of Administering Ergot after the Third Stage of Labor.**—The hand of the attendant should follow the descent of the uterus, thus exciting it to contraction. The condition for the following half hour will indicate if ergot be necessary. After-pains are more severe and continuous when the drug is given, and as the effect of an ordinary dose is simply upon the circular fibres of the cervix and internal os, the passage of the natural discharges is impeded, involution delayed, and the occurrence of concealed hemorrhage is favored. In the cases where ergot is indicated it should be given for effect. Of course, we run a risk of the same dangers as those just enumerated, but the beneficent effect in preventing a dangerous condition more than counterbalances any harmful effects. And here, too, the conditions are different. We are aiding an organ to perform its work as nearly naturally as we have the ability to do, while in the other we are interfering with an organ doing its work effectively in a natural way, and placing it in an unnatural condition.—*Therap. Gazette*, July 15, 1892.

**Newell (T.) on the Use of Large Doses of Acetate of Lead in Hemorrhage.**—The hemorrhages in which the salt has been found most beneficial are hæmoptysis, epistaxis, and post-partum uterine. The following instance of its use



is reported : On January 7, 1877, I was summoned to attend Mrs. C., aged twenty-two, in her first confinement. Labor progressed normally and in seven hours she was delivered of a healthy female child. After waiting a short time I removed the placenta, and as was taught me and as directed in the standard works. The uterus seemed contracted down firmly, and no flooding of any moment occurred. On coming into the room after a short absence, I was alarmed at the exsanguined appearance of the patient ; divining the cause, I immediately grasped the now relaxed uterus, whilst I introduced my right hand into the uterus, and by making both internal and external manipulation endeavored to excite contraction, the blood in the meantime flowing in a perfect torrent. Realizing that my patient would perish in a few minutes if I did not arrest the hemorrhage, I called for my medicine case, and taking out a teaspoonful of the crystallized acetate of lead I ordered it to be dissolved in water, and administered it to the patient at once, and at the same time had an assistant raise the foot of the bed. The effect of the lead was, I might almost say, magical, the flooding ceased at once and in a very short time the uterus contracted and expelled my hand. I then applied the binder with a compress underneath, and after giving some nourishment and an opiate, waited a couple of hours and went home. The patient under nourishment and an occasional opiate made a rapid and safe recovery. In this case I feel quite confident, had I trusted to ergot, with manipulation, cold, etc., that before contraction became established my patient would have sunk never to rally.—*The Physician and Surgeon*. July, 1892.

**Philip (A. A.) on the Treatment of Post Partum Hemorrhage with Complete Atony of the Uterus.**—The author advises the use of an india-rubber bag, pear-shaped when distended as large as the cavity of the uterus at term, and tapering at its lower end to a tube about  $4\frac{1}{2}$  feet long,  $\frac{3}{4}$  inch in diameter, tube with clamp attachment. Air or water may be used for distension. In case of water, care must be taken to expel all air possible by folding the bag firmly upon itself, beginning at the fundus, ending at the clamp. The bag should be crumpled in the hand and carried up to the fundus uteri. Uses about four quarts of water. By this method hemorrhage can be checked in less than a minute.

The *modus operandi* of this appliance is very apparent, and it embraces many of the principles upon which the treatment of post-partum hemorrhage is based. Briefly it acts thus : (1) by *direct pressure* on the bleeding point ; (2) by *inducing contraction* when reflex excitation returns ; (3) by *favoring thrombosis in the uterine sinuses*, acting as a foreign body at their mouths ; (4) by restoring the circulation of the abdomen and thus *raising the general blood pressure* and thus minimising the risk of thrombosis in heart or lungs ; (5) by *partially compressing the abdominal aorta at its bifurcation* if the binder by tightly applied ; (6) it *fills up a large space*, which, if not filled, would be capable of holding a large quantity of blood. With the bag filled in the uterus and a plug in the vagina little space is left for blood to collect in. The method should not be employed when there is extensive laceration of the cervix.—*The Med. Press*, July 20, 1892.

**Duke (A.) on the Importance of Examination of the Genital Tract Directly after Labor.**—Flushing of the uterine cavity immediately after delivery is advised, followed by a visual and tactile examination.

By the hot-water flushing we get rid of several sources of danger, and, if a thorough examination is then made for vaginal or cervical injuries, it will be a comparatively easy matter, when such are found, to draw together the torn surfaces in severe lesions with catgut sutures, and cauterize the parts in minor ones with strong carbolic acid, thus leaving the parts concerned in a better condition for repair and less liable to absorb. It will be obvious that at no other time subsequent to labor have we a better opportunity.—*The Med. Press*, July 20, 1892.

**McKee (E. A.) on Habitual Abortion.**—When fatty degeneration of the placenta is the cause of this habit, McK. orders chlorate of potassium, gr. xv. t. i. d., until the end of gestation.

A case in point : The child was married at fifteen, at seventeen a history of two miscarriages. One year a widow. Remarried and had eight miscarriages—two in the same year. Husband healthy. At next pregnancy, the above treatment was instituted, and in due time a healthy boy was born. In about eighteen months she was again three months pregnant—the same treatment, and occasionally iron, bismuth, and nux vomica. At term, another boy.—*Am. Jour. of Obs.*, June, 1892.

**Kollock (C.) on a Case of Pelvic Contraction; Mother and Child Both Saved by a Timely Resort to Laparo - Hysterotomy.**—Patient *set.* twenty-eight years, general health good. First labor, September 7, 1885; second, July 12, 1887; third, March 20, 1892. In the first and second labors, embryotomy was done. Parts greatly mangled and lacerated. The writer was summoned at the third accouchement. Careful examination by touch and the pelvimeter, true conjugate found to measure a fraction less than one and a quarter inches. Patient had been in labor about six hours, but contraction of the uterus had not been strong. Saenger's operation was decided upon, and done, of course, with aseptic and antiseptic precautions.

An incision of eight inches was made in the median line below the umbilicus. This brought the uterus into view. To protect the abdominal cavity, the cervix was surrounded with a thin sheet of india-rubber moistened with a five per cent. solution of carbolic acid. The cervix was also constricted with Esmarch's elastic tube. To open the cavity of the uterus, a vertical incision of six inches was made in its anterior wall about its middle third, in order to avoid the fundus and cervix. The membrane was now ruptured, and the child was brought out by the feet, the head being down in the cavity. It is somewhat remarkable that the child was not asphyxiated, and that it cried vigorously as soon as atmospheric air reached it; when the uterus was contracted the tube was removed and the ruptured arteries were secured. The incision in the uterus was now closed by twenty interrupted sutures, twelve deep and eight superficial. The sutures were introduced so as to include the peritoneal and muscular coats, avoiding the mucous. The sutures were applied in the manner of Lembert's intestinal sutures, so as to welt in the peritoneum, thus securing a speedy union by maintaining the serous surfaces in contact. These sutures in the uterus were all of carbolized silk. The catgut is not to be depended upon, for when they become moistened they stretch, and sometimes the knots become untied. The whole abdominal cavity was now thoroughly washed out with hot sterilized water. No drainage was used, as there could be no leakage after the thorough closure of the incision of the uterine walls. The exter-

nal incision in the abdominal walls was closed by silver wire.

Feeling it to be a duty to this brave woman to save her from suffering and the risk of her own life, that must attend upon another pregnancy, and knowing that the removal of the ovaries would not lessen her chance of recovery, I did Batty's operation. The ovaries were in a perfectly healthy condition, and would probably sooner or later cause another conception. I do not remember an operation of as much magnitude as this that did as well. The temperature was never above 99°, and the pulse never above 90.—*N. Car. Med. Journal*, July, 1892.

**Nafe (G. W.) on the Genu-Pec-toral Position.**—A shoulder presentation was treated in the following manner: I had the patient get upon her knees on bed-quilts and pillows placed in the centre of the bed, to the height of about eighteen inches, her chest and face lying flat upon the bed, fetching the back at an angle with it of about forty-five degrees, the knees being a little apart. I then passed my hands—being smeared well with lard—in the vagina, and with scarcely an effort, and without the least complaint or evidence of uneasiness upon the part of the patient, crowded back and, of course, down, in her position, the shoulders; and slipping my hand between the brim of the pelvis and the foetal head, I spread out my fingers and brought or directed it during a pain to the superior strait, and then, retaining the grasp, we had her turn her hips down carefully upon the bed, when, after a pain or two, the head engaged in the superior strait, and we had a perfectly natural presentation, without having used the least violence or apparently caused any pain or uneasiness to the patient; and all accomplished, I should judge, within five or ten minutes. Labor terminated favorably in a few hours, the patient giving birth to a ten-pound boy, and alive and well.

The author reports eleven cases of transverse presentation, seven of which were readily converted to a vertex by the kneechest position and gentle manipulation. A case is cited in which the arm had occupied the vagina for about ten hours, with strong expulsive efforts, before the patient was reached. This patient also yielded to the treatment. The position is also advised in persistent vomiting during early gestation. *Am. Med. Jour.*, July, 1892.

## REPORT ON SURGERY.

BY CHARLES N. DOWD, M.D.

**Halsted (W. S.) on Ligation of the First Part of the Left Subclavian Artery and Excision of a Subclavio-Axillary Aneurism.**—Prof. Halsted has reported the following case, which is a remarkable illustration of the possibilities of aseptic operating, and the method of healing under a blood clot.

The successful ligation of the first part of the left subclavian has been considered almost an impossibility. In the records of the older ligations on the right side, a much easier operation, we find regularly a report of death from hemorrhage, or some form of sepsis.

In Prof. Halsted's case the report at the end of thirteen days is, "no unpleasant symptoms"; at the end of the sixtieth day, "the wound has healed in an ideal way, and the patient has an excellent use of the arm."

The method of excising the aneurism and allowing the place where it lay to fill with a blood clot is one of great interest. If the clot does not break down secondary hemorrhage could hardly occur. The granulation tissue which springs up in the blood clot will help to bring a blood supply about the ends of the ligated vessels where it is especially needed. It will be interesting to note what results follow this method in cases where the collateral circulation has not been established so well as it had in this one.

Prof. Halsted's report of the case is given in full:

Levin Waters, colored, æt. 52 years, was admitted to the hospital April 30, 1892. Patient is a vigorous man, gives a good family history and denies having had syphilis. Perfectly well until eight months ago; he then noticed a small swelling about the size of a madeira nut under the left clavicle. He is sure that there was at this time a distinct pulsation in the tumor. He "could feel it beat like his heart" when he put his fingers upon it. The tumor has grown rapidly since it was first observed. Until one month before the operation the patient worked regularly, did heavy lifting, etc., and had experienced little or no discomfort from the aneurism. His only symptoms were a slight numbness of the

left hand and forearm, and, subsequently, a shortness of breath and a hoarseness—both of which he attributed to a cold.

Patient says that he has never had a pain which could be referred to the tumor.

On admission, the patient had an almost spherical, perfectly smooth tumor under the left clavicle. It was somewhat flattened on the side which pressed against the chest-wall, and measured 42 cm. in circumference at its base. The middle third of the clavicle was overlapped and almost concealed by the tumor; the lower margin of the tumor touched the fourth rib.

Internally it extended to within 5 cm. of the left sternoclavicular articulation, and externally to within 4 cm. of the coracoid process. The skin over the tumor appeared to be normal. It was only after careful inspection that pulsation could be seen. To the touch the tumor was quite solid but elastic, and it was not easy to feel the feeble expansile pulsation. No pulse could be felt at the wrist nor anywhere below the aneurism. The left arm was neither swollen nor perceptibly cooler than the right.

*The Operation.*—The skin incisions: 1. *Horizontal*, about 33 cm. long, from the sternal notch to the acromio-clavicular articulation, and thence down the arm to the lower border of the major pectoral muscle over the greatest convexity of the tumor. 2. *Ascending, vertical*, about 5 cm. long, from the internal end of the horizontal incision. 3. *Descending, vertical*, about 10 cm. long, from the middle of the horizontal incision. 4. *Ascending, vertical*, about 4 cm. long, from the horizontal incision at the acromio-clavicular articulation.

The flaps so outlined were reflected, the first, upwards and outwards; the second, downwards and inwards; the third, downwards and outwards. The inner third of the clavicle was then excised. The middle third of the clavicle was somewhat eroded by the aneurism, which overlapped it a little.

The wall of the aneurism was inflamed, soft, and so very thin where it pressed upon the bone, that it would have been imprudent to attempt to dissect this part of the clavicle from the tumor.

The next step in the operation was the deligation of the left subclavian artery. This portion of the artery had been drawn down by the tumor, so as to occupy a horizontal position rather than a vertical one. It was entirely concealed by the subclavian vein, and lay below and behind the vein instead of above and behind it. I thought for a moment that it might be necessary to excise a portion of the first rib to expose the artery. Two strong silk ligatures were applied to the artery as it emerged from the chest, and the vessel was divided between them. The deltoid muscle was cut through a little below the clavicle, and the clavicle sawed through at about  $2\frac{1}{2}$  cm. from its outer end. The aneurism, the greater part of the clavicle, a piece of the deltoid muscle and about 6 cm. of the subclavio-axillary vein were then removed in one piece. The vein was intimately adherent to the aneurism. The axillary artery was ligated at the beginning of its second part. The operation as a whole was a tedious one and consumed three and a half hours. The wound was closed with interrupted buried skin sutures of fine black silk. The large dead space incompletely covered by the skin was bridged over with gutta-percha tissue.

At this, the second dressing, thirteen days after the operation, it was observed that the dead space was almost completely filled with a blood clot. This clot had not broken down and was almost completely replaced by granulation tissue. The patient had not had an unpleasant symptom since the operation.

The left arm has never swelled and has at no time been cold. For a few days only there was a slight numbness of the tips of the fingers and particularly of the thumb. The case was altogether a most fortunate one for operation, in that, thanks to the clot which occupied the sac, the collateral circulation had already been well established.

This case is, perhaps, the only successful one of deligation of the first part of either subclavian artery, and the first of complete extirpation of a subclavio-axillary aneurism.

I find practically but one comment from surgeons on these results, viz., if absorbable ligatures had been used, and if the coats of the artery had not been divided, the mortality from secondary hemorrhage might have been less. I would suggest, rather, that the aneurism be excised.

*Note.*—July 9th, sixty days after operation. The wound has healed in an ideal way. The numbness at the tip of the left thumb has not completely vanished. No pulse is to be felt at the wrist. The patient has an excellent use of his arm.—*Johns Hopkins Hospital Bulletin*, Aug., 1892.

**Berger (Paul) on Fatal Poisoning Produced by the Injection of a Solution of Hydrochlorate of Cocaine into the Tunica Vaginalis after the Tapping of a Hydrocele.**—The patient was about forty years old. After the tapping of his hydrocele about a tablespoonful of a two per cent. solution of cocaine was injected into the tunica vaginalis and after two minutes allowed to run out again. Tincture of iodine was then injected and withdrawn after a few minutes. Fifteen minutes later the patient, who felt perfectly well, started to go home, but became nauseated and fell down unconscious. General tonic and clonic convulsions followed. He became pale. The pupils dilated. The pulse, which at first was strong and rapid, became weak and irregular. Respiration failed, and after a short time he died.

The autopsy revealed nothing abnormal excepting mitral insufficiency.

Réclus, in discussing the subject, stated that fifteen deaths after the use of cocaine have been recorded. In two of them, in which respectively gr.  $\frac{1}{10}$  and gr.  $\frac{1}{32}$  of cocaine were injected it could not be positively stated that the injection caused the death. In all the other cases more than gr. iii.  $\frac{3}{8}$  were used. Slight symptoms of poisoning have often followed small doses, gr.  $\frac{1}{4}$  to  $\frac{1}{2}$ .

He believes that with equal quantities of cocaine strong solutions are more dangerous than weak ones. He recommends the use of solutions not stronger than two per cent.—*Centralblatt für Chirurgie*, Aug. 13, 1892.

**Jalaguier on Purulent Peritonitis Following a Traumatic Rupture of the Cæcum; Median Laparotomy; Irrigation of the Peritoneum; Recovery.**—A twelve-year-old girl fell and struck her abdomen against the corner of a chest. She felt a sharp pain, and fainted. She was given opium, but suffered from vomiting, and developed symptoms of a diffuse peritonitis. On the fifth day after the accident laparotomy was performed. median incision about three inches long

was made below the umbilicus. After separating the adhesions between the omentum and anterior abdominal wall a large cavity was found which was filled with foul-smelling pus and gas. Its wall was composed of matted intestines and extended above to the level of the kidneys, below to the true pelvis. The cæcum lay diagonally so that the vermiform appendix was left of the median line, the appendix was uninjured.

On lifting up the cæcum however bubbles were noticed coming from a slit like perforation in the lower posterior part of the cavity. There was much fibro-purulent exudation about the perforation.

No attempt was made at stitching it up. The cavity was washed out with a boric acid solution, then with boiled water, and was packed with salol gauze. The symptoms of peritonitis subsided and the patient recovered completely.

The reviewer, Reichel, calls attention to the fact that the operator was dealing with a cavity which was shut off from the general peritoneal cavity, and states that this has generally been the case where recovery has occurred after or more properly in spite of the washing out of the peritoneal cavity for purulent peritonitis. The fluid did not penetrate the free peritoneal cavity and so change a circumscribed into a diffuse inflammation.

There are several points about this case which are of interest:

1. It is remarkable that after an intestinal rupture a large cavity should thus have been shut off from the general peritoneal cavity by adhesions.

2. The operator was especially fortunate in cutting into this abscess cavity when he made his incision.

3. He was very wise in making no attempt at sewing up the perforation.—*Centralblatt für Chirurgie*, August 13, 1892.

**Barnes (A. C.) on Backward Dislocation of the Head of the Radius.**—Backward dislocation of the head of the radius is a very rare occurrence, Markoe, quoted by Agnew, having been able to collect records of but twenty-eight cases. The following presented so many characteristic symptoms as to make the correctness of the diagnosis indisputable:

W. C., six years old, fell with considerable force, and in an effort to protect his trunk from injury suddenly threw out his

right arm, so that the violence came directly in contact with the palm of his hand, while his arm was in an extended and extremely pronated position—a similar history, it will be observed, to that of most cases of "Colles' fracture." Ten minutes after the accident the boy was brought into the hospital, and presented the following deformity: His arm, in a position of almost complete pronation, was flexed at an angle of about  $120^{\circ}$ ; his hand was also somewhat flexed and fixed. An examination of his elbow-joint, the normal contour of which was but slightly disturbed, revealed behind the external condyle a hard, resisting mass, to which a distinct rotary movement could be communicated by force applied to the distal extremity of the radius. To prove that this mass was the displaced head of the radius, we searched in the position in which the head of the radius normally lies, and detected there a slight depression corresponding with the position of the sigmoid fossa. Careful and repeated manipulation failed to elicit crepitus—thus excluding fracture of the internal condyle—a complication that frequently exists in conjunction with backward dislocation of the radius. Attempts at flexion, extension, pronation, and supination were attended with excruciating pain—a fact that would seem to indicate laceration of the capsular ligament. The treatment was very simple. The patient being etherized, counter-extension was applied to the arm, with extension of the forearm and direct pressure on the dislocated head of the bone. The latter readily slipped into its normal position. The joint was then enveloped in gauze saturated with lead-water and laudanum, an anterior extreme obtuse-angled splint applied, and the arm dressed in supination. Subsequent daily dressings show that the bone is still in position. The result thus far indicates perfect recovery, with preservation of the integrity of motion.—*Med. News*, July 23, 1892.

**Shepherd (F. J.). Note on the Dissection of a Case of Lumbar Hernia.**—He found in the dissecting-room a small hernia through the latissimus dorsi muscle, 1 inch above the crest of the ilium, 3 inches to the left of the vertebral column.

A piece of fat about as large as a small walnut had been pushed through a circular opening here. It did not come through Petit's triangles. It was covered with a very thin transparent sac.

It consisted of an epiploic appendix from the descending colon.

He suggests that it might have been mistaken for a fatty tumor during life and that bad results might have followed an operation.—*Annals of Surg.*, Aug., 1892.

#### Dandridge (N. P.) on Surgery of the Tongue.

1. Sufficient experience has been accumulated to show that the removal of cancer of the tongue prolongs life and adds to the comfort of the patient and further affords a reasonable hope of a permanent cure.

2. All operations should be preceded by an effort to secure thorough disinfection of the mouth and teeth.

3. In the treatment of continued ulcers and sores on the tongue caustics are to be avoided and all sources of irritation removed.

4. Persistent sores on the tongue should be freely removed by knife or scissors if they resist treatment.

5. When the disease is confined to the tongue Whitehead's operation should be employed for its removal.

6. In this operation the advantage of preliminary ligature of the lingual artery is not definitely settled, but the weight of authority is against its necessity.

7. The advantage of leaving one-half the tongue in unilateral disease must be considered undetermined, but the weight of positive experience is in its favor. In splitting the tongue into lateral halves Baker's method of tearing through the raphé should always be employed.

8. A preliminary tracheotomy adds an unnecessary element of danger in the removal of the tongue in ordinary cases.

9. When the floor of the mouth has become involved or the glands are enlarged, Kocher's operation should be performed, omitting the spray and preliminary tracheotomy.

10. Removal of the glands by a separate incision after the removal of the tongue must be considered insufficient.

11. Volkmann's method still rests on individual experience. Its just value cannot be determined until it has been subjected to trial by a number of surgeons.

12. Thorough and complete removal should be the aim of all operations, whether for limited or extensive diseases.

13. By whatever method the tongue is removed the patient should be up and out of bed at the earliest possible moment, and should be generously fed.—*Annals of Surg.*, Aug., 1892.

## REPORT ON DISEASES OF THE EYE AND EAR.

BY A. T. MUZZY, M.D.

**Van Fleet (F.) on Astigmatism: its Location and Detection.**—The writer urges all oculists to purchase and use the ophthalmometer as an instrument of precision. "The value in my mind is dependent on two things: first, the seat of the trouble; and, second, the accuracy with which we determine its exact nature." Yet in the case cited by the doctor he admits the need of the ophthalmoscope or lens to find out whether the astigmatism is hyperopic or myopic. Further, the doctor concludes that "atropine is a most valuable agent in the treatment of certain diseased conditions of the eye, but for the determination of error of refraction it is not only uncertain and often misleading, but absolutely unnecessary.—*N. Y. Med. Four.*, July 9, 1892.

**Dalby (W.) on Cancer of the Ear.**—In an experience in aural practice of twenty years the author reports six cases

where cancer started primarily in this locality. These all, with one exception, started in the middle chamber. The remaining case started in an ulceration of the mastoid process close to the outer ear, and proceeded inwards. In all save two of the writer's cases, and all other cases of the disease reported, of which there are few, there was a preceding condition of suppuration. In only one of the cases was there a family predisposition towards the disease. In one of the six cases and one of the recorded cases traumatism immediately preceded the suppuration and consequent malignant process.—*Lancet*, July 2, 1892.

**Woodward (J. H.) on the Ophthalmometer of Javal and Schiötz and the Diagnosis of Astigmatism.**—After careful use for about one year the writer began the collection of data to prove the value of this instrument compared to the simple subjective method. From Octo-

ber, 1891, to March following eighty-eight trials were made and recorded, from which he draws the following five conclusions, as reasons why the variation incident to the ophthalmometer in the diagnosis of astigmatism is not a constant quantity :

1. The anterior surface of the cornea is not spherical ; it is ellipsoidal ; hence the measurement of its curvature by the Javal-Schiötz instrument is only approximately correct.
2. The ophthalmometer does not deal with the portion of the cornea through which the visual line passes, but with an angular segment about 1 mm. distant from the visual line. It must be assumed that the curvature at the visual line is the same as that of the surface measurement. This may or may not be the case. Hence another source of error in ophthalmometry.
3. The ophthalmometer does not inform us respecting the posterior surface of the cornea. If the posterior surface of the cornea be not parallel to the anterior surface, that condition will influence the refraction of light. There is no reason to suppose that the surfaces of the cornea are strictly parallel to each other. And hence another source of error.
4. The ophthalmometer does not measure lenticular astigmatism, and this may be an important error.
5. In the adjustment of the ophthalmometer and in the estimation of the amount of overlapping of the reflectors an error of  $\pm 0.25$  D is not easy to eliminate.

It is useful as an adjunct to other methods of diagnosis, and is especially liable to point the way when the astigmatism is of high degree. But it gives no information respecting the kind, whether it be simple, compound, or mixed.—*N. Y. Med. Jour.*, July 16, 1892.

**Norton (A. B.) on the Removal of a Tumor of the Optic Nerve with Preservation of the Eye.**—Success in this procedure is rare. The case is reported by the writer from the records of his brother, the late Geo. S. Norton.

A lady of thirty presented her right eye for treatment. It had been steadily protruding for ten or twelve years, with pain during the past five, which radiates to the back and stomach. Examination gave V  $\frac{2}{30}$  R and  $\frac{1}{15}$  L; protrusion amounts to 22 mm, varying different days, being especially prominent during menstruation; retinal vessels contracted and optic nerve atrophic; movements of eye as good as

could be expected. The operation consisted of an incision between superior and internal recti of a size to admit the finger down to the tumor. Using the finger as a guide, the tissues about the tumor were dissected back to the optic foramen. The nerve was then cut at the foramen and afterwards close to the globe, and the tumor lifted out. The nerve next the globe was clear and white. The wound was bathed with 1-1000 bichloride solution, the globe returned to its position and covered by the lids. Little hemorrhage occurred but considerable infiltration. Compress bandage and ice were applied. For three or four days the swelling from infiltration and conjunctival chemosis was excessive, but under ice and pressure subsided, not before some haziness of cornea from baring of globe beyond the covering of the lids. This was stayed by strapping lids together. The operation was performed October 7, 1890. When last seen, May 3, 1892, examination showed slight, if any, protrusion, a trifling limitation to movements in all directions, but perfectly parallel with its fellow. Oblique illumination shows a very slight opacity; the pupil is a little dilated, the optic papilla is brilliantly white, with a faint line for the central vessels; through the retina are a few vessels; a few choroidal changes. The tumor was from macroscopical examination a myxoma, it covering the dilated sheath of the nerve.—*Arch. Ophthalm.*, July, 1892.

**Black (G. Melville). Does Javal's Ophthalmometer Render the Use of Atropine Unnecessary?**—The results of two and a half years' experience lead the writer to a negative conclusion; the instrument often indicating an astigmatism contrary to that found by atropine and proved by use of glasses. That is, the instrument indicated an astigmatism of  $90^\circ$  when  $0^\circ$  was finally proven. Yet as a *help* in refraction work he gives it his approval. The point of the paper is against the sweeping conclusions of D. B. St. John Roosa, his preceptor in its use for more than a year and a half.—*Arch. Ophthalm.*, July, 1892.

**Pusey (W. B.) on Unusual Family History in Two Cases of Glaucoma.**—The history of the individual cases is the ordinary one. They were both lads of seventeen and thirteen. The first gave a history of seven months' repeated attacks

of neuralgia in the eyes accompanied by blindness, from which he recovered less and completely. The heredity consisted in blindness from neuralgia in his mother, his mother's uncle, his mother's brother, his sister, and himself. The second was a history of gradually failing sight for eight months, with pain in eyes and head. The heredity consisted of father, father's mother, a brother, and a sister all blind from glaucoma. That this comparatively rare disease should occur so often in two families is something more than coincidence. It is also remarkable that even here it should occur so often at an age that gives only one per cent. of all cases of glaucoma.—*Arch. Ophthalm.*, July, 1892.

**Würdemann (H. V.) on Condylomata of the Auditory Canal.**—This specific lesion is quite rare. Deprès out of twelve hundred syphilitics and nine hundred and eighty with condylomata found only six cases of condylomata of the auditory canal. Otorrhœa usually precedes the lesion. It may occur without other systemic symptoms, causing much difficulty in treatment. When at the meatus they are usually single, but when situated deeper may be multiple. Stöhr finds them usually about the middle and single.—*Arch. Otol.*, July, 1892.

**Spalding (J. A.) on Three Cases of Epithelioma of the Auricle.**—The first, a man, forty-one years old, with no family history, had for two years a gradually growing sore on the helix. In November, 1891, a V-shaped piece of the helix was removed and the wound sutured. Healing was rapid and complete. In February, 1892, he re-appeared with the condition as bad as before and constantly painful. Ablation was again performed, leaving merely a stump. The second was a man without family history who had suffered for three years with a ragged sore behind the helix at its juncture with the head. The part on the auricle was carefully abscised without cutting the cartilage too deeply, and the rest as thoroughly as possible scraped away from the fissure and to its limits on mastoid. Recovery was prompt. Three months later no relapse. The third case was a man of sixty years, who for five years had noticed a hard lump behind the helix without irritation, pain, or hemorrhage. It finally broke, became painful, and bled with the slightest touch. It was removed

with the knife, dissecting deeply into the cartilage. After four months there has been no return. The microscopic examination in each case proved the epitheliomatous character of the growth. The return in the first case is laid to the fact of the employment of sutures in the operation; straps might have avoided it. Personally the writer would use the sharp spoon to scrape away all morbid tissue where feasible. The writer calls attention to the markedly greater frequency of epithelioma of the ear among men than among women.—*Arch. Otol.*, July, 1892.

**Sheild (A. Marmaduke) on a Case of Sinus Thrombosis, Attended with Remarkable Ocular Symptoms.**—A man thirty-five years old, who had suffered many years with right otorrhœa, after an attack of influenza, was seized with fever, severe pain in the head and ear, increased suppuration of ear, occasional rigors, right eye more prominent than the left. Subsequently there developed some ptosis and right facial paralysis. The intellect remained clear, though there were occasional fits of wandering and slight delirium. Temperature was throughout of a pyæmic nature. Exophthalmus increased, the left also protruding. The lids were greatly engorged, the veins showing prominently. The left pupil was dilated and immovable. There was no strabismus. Well marked optic neuritis was present. Near the root of the nose was a slight red streak, which to the finger showed the presence of a thrombosed vein. There was no tenderness or œdema over the mastoid, but there was distinct tenderness and fulness over the internal jugular. The writer refused operative treatment, judging that the exophthalmos was due to engorgement and clot of the cavernous sinus. The origin of the mischief was caries of the right mastoid and thrombus of the lateral sinus. Post-mortem showed four small abscesses in the cortex cerebri and corpus striatum, evidently secondary and embolic. The ophthalmic veins were full of firm thrombus; the cavernous sinuses and right petrosal sinus full of pus. The right lateral sinus contained pus and clot. The adjacent bone was rough and infiltrated with pus. The adjacent surfaces of the cerebellum and medulla were coated with pus. The chief point of interest, and difficult to explain, were the remarkable ocular symptoms.—*Arch. of Otol.*, July, 1892.



**Dench (E. B.) on Two Unusual Cases of Intracranial Inflammation Following Purulent Otitis Media, with Mastoiditis.**—One of these cases

was a child of ten months. The ear inflammation affected a large portion of the periosteum covering the mastoid, disintegrating also the bone. Wide opening, cleansing out of carious material, and good drainage from wound and ear did not prevent subsequent spread of infection from upper part of area through squamo-mastoid suture, through meninges deep into cerebral tissue, terminating in death. The second case was that of a man of forty, with doubtful specific history. A severe acute inflammation of the right ear was attended by decided œdema of temporal and orbital and mastoid regions. Operation revealed widespread separation of bone and periosteum; considerable sclerosis of bone. Subsequent operation brought out necrotic bone. Post-mortem showed hemorrhagic pachymeningitis of entire right side, especially marked over frontal and temporo-sphenoidal regions.—*Arch. of Otol.*, July, 1892.

**Knapp (H.) on a Case of So-Called Bezold Variety of Mastoiditis.**—A young woman of good constitution, suffering for a year from repeated attacks of acute naso-pharyngeal catarrh, extending to both ears. The left ear recovered. The later attacks showed implication of right mastoid, with marked meningitic irritation. Upper part of sterno-mastoid muscle became red, swollen, and painful. On opening, a good deal of pus was liberated. Relief being only temporary, the mastoid, from base to tip, was opened, giving another short term of relief. Cerebral irritation reappeared, and after three months ended in death. Symptoms were persistent headache, nausea, occasional vomiting, dizziness, stupor, impediment of speech, loss of appetite, constipation. Pulse at first 70 to 88, sunk to 60. Temperature registered from 98° to 100°, with no sudden changes. There never were any convulsions, chills, deliria. The ear for last three months gave no trouble. Two months before death a sudden swelling was noticed on *left* sterno-mastoid, just below the mastoid, which never entirely disappeared. The left ear remained healthy. Autopsy showed (1) perforation in the median bony surface of the tip of the right mastoid process; (2) upper part of tympanic cavity filled with

granulation tissue, but free from pus; (3) right lateral sinus corresponding to diseased ear healthy, but filled with dark clotted blood; (4) dura healthy throughout; (5) pia of right temporal lobe and right cerebellar hemisphere milky, its small veins filled with pus; (6) the sinuses in the median line, those adjacent to the median line on the right side, and all the sinuses of the left side, besides the left internal jugular vein as far as swelling noted on sterno-mastoid muscle, filled with pus; (7) in the right temporal lobe an abscess, size of a walnut, and in right cerebellar hemisphere another; (8) rest of brain, especially ventricles, normal. The case shows how occult the objective symptoms and how unexpected the location of cerebral thrombophlebitis may be. The case is remarkable for absence of symptoms on which much stress is usually laid. (1) There evidently was suppuration in the mastoid long before external swelling indicated it. (2) The absence of otorrhœa through the whole course is remarkable and exceptional. (3) There was sinus thrombosis of great extent, without the common symptoms of rapid rise and fall of temperature. Ordinarily the thrombosed jugular can be detected as a hard, painful cord along the side of the sterno-mastoid muscle. (4) The sinus thrombosis was most marked on the side of the healthy ear. (5) The cerebral abscesses showed, aside from insignificant fever, only one objective symptom, double optic neuritis, during the last month. But this is a late and inconstant symptom. In conclusion, the significance of subjective cerebral symptoms may be thus expressed: (1) Transient headache, nausea, vomiting, and dizziness in acute cases indicate meningitic irritation. These cases nearly all recover, with or without mastotomy, only a few cases of fatal termination being on record. (2) Persistent headache, nausea, vomiting, and dizziness, especially with diminishing discharge from the ear, indicate transition from irritation to real meningitis, and demand surgical interference—paracentesis of drum, especially of bulging membrana flaccida, or opening of the mastoid. (3) The above symptoms, with delirium, stupor, impediment of speech, chills, spasms, drowsiness, and coma, signify fully developed intracranial suppuration. In many it is impossible to discriminate the form or locality.—*Arch. of Otol.*, vol. xxi, No. 3, 1892.

## REPORT ON THERAPEUTICS.

**Anæmia and Mountain Air.**—That *mal de montagne* is as distinct an ailment as *mal de mer* may be realized by all who make mountain ascents with great rapidity. It is due to the lower pressure of the atmosphere incident to lofty altitudes, or rather to the reduced oxygen pressure, whereby the gas is no longer capable of being dissolved in sufficient quantity in the blood of individuals accustomed to live in the plain. In such individuals, however, acclimatization gives immunity from the *mal de montagne*, the circulation gradually increasing the number of the blood globules which, in greater mass, dissolve ever greater quantities of oxygen, and more than make up for the reduced pressure of the gas. It is to M. Paul Bert that we owe the experimental proof of this. Examining the blood of the llama or Peruvian sheep, he found that for every 100 cc. it absorbed, on an average, 20 cc. of oxygen, while in the herbivora of the plain, the respiratory capacity of the blood did not exceed fifteen per cent. Viault, with identical results, repeated the experiment on the spot. Müntz had the same experience on the Pic du Midi, where he left rabbits of the plain to live freely, and after a year found their blood much richer in hæmoglobin than that of the rabbits kept for comparison on the lowlands. To the experiments above mentioned, however, it may be objected that the increase in the hæmoglobin might be due to cold, to the open-air life, in short to the special conditions of the atmosphere which stimulate appetite and assimilation in animals. In answer to such objections Regnard, in his laboratory, subjected a rabbit, enclosed under a bell-glass, to a continuous atmospheric depression, two bell-glasses being so placed together as to admit of the rabbit passing from one to the other when it became necessary to effect certain cleaning and disinfecting operations. After a month of this incarceration, where the atmospheric depression was such as to correspond with that of the Great St. Bernard or of Santa-Fé de Bogota (height about 3,000 metres), the rabbit emerged, not very lively indeed, but to some small degree fatter. On the blood being examined, it was found that it absorbed 21 cc. per cent. of oxygen—that is to say, as much as that absorbed

by the blood of the Peruvian sheep; while the blood of rabbits kept under normal conditions in the plain absorbs only 17 cc. It is therefore the atmospheric depression which increases the respiratory capacity of the blood in animals. Regnard's confirmation of his predecessors' results serves to explain the efficacy of certain climatic resorts in Switzerland, particularly in anæmic and chlorotic patients and in sufferers from neurasthenia. It is the atmospheric depression which, in conjunction with good hygienic conditions, acts on those invalids and promotes in their blood the formation of new sanguineous globules fit for the assimilation of oxygen. The more abundant nutrition and the augmentation of the appetite observable in a sojourn in the mountains are not the cause, but a consequence, of the improvement which such sojourn brings. Indeed, even admitting that the hæmatogenous action of elevated sites may owe something to other causes, as Viault contends, it is difficult to resist the induction of Regnard that climatic establishments are in general to be preferred to mineral water resorts—certainly to those whose reputation is chiefly built on fashion, on entertainments, or on the *ensemble* of adventitious attractions, from which health, pure and simple has little or nothing to gain.—Ed., *London Lancet*, Aug. 13, 1892.

**Budin on Artificial Feeding of Infants.**—M. Budin has lately conducted some experiments on the above subject in his wards at the Charité Hospital, and communicated the results to the Académie de Médecine on the 19th ult. The system followed in his practice is to administer to all the newborn children, for the first three days, cow's milk sterilized by means of Soxhlet's apparatus; this sterilised milk supplementing or replacing the maternal supply according to circumstances. The milk is given undiluted with water. Should the quantity of the mother's milk be sufficient the artificial product is not given. If the maternal supply is deficient, or absent, the sterilize milk is continued wholly or partially. Notes were taken of these three categories of infants under observation from April 1 to June 28, 1892. Of 89 fed exclusively at the breast after the third day the average daily gain of weight was 28

grammes 17 centigrammes. The average daily gain of weight from the second day of 91 infants submitted to the mixed diet was 18 grammes 16 centigrammes, the corresponding average in 11 infants fed on sterilized milk only being 14 grammes 24 centigrammes. The average daily increase in weight for the 191 infants, taken together, was 22 grammes 59 centigrammes. Of the 89 breast-fed children 6 had diarrhœa, whilst 7 such cases occurred amongst the 91 mixed-diet infants and none amongst the 11 artificially fed. In no instance was the diarrhœa severe, and all the little patients recovered. It will be noticed that the development of the nursling, as judged by the daily increase in weight, was most marked in the case of the breast-fed, less in the partially breast-fed and least of all in the artificially fed. The total absence of gastro-enteric complications amongst the children brought up exclusively on sterilized cow's milk is an important feature of M. Budin's communication. That physician is, however, very emphatic in his preference for breast feeding and pronounces strongly in favor of daily weighings as being the most reliable means of ascertain its physical progress.—*London Lancet*.—Aug. 27, 1892.

#### **Injection of Milk into the Veins.—**

A correspondent writes to ask us whether the statement contained in Cope's *Natural History* of 1864 be true that "if milk be injected into a vein it will quickly become fatal, and that with more certain destruction than even the venom of the viper." Our correspondent also wants to know, if this be true, how is the danger brought about. It is not the first time these questions have been submitted to us for answer, and we admit they are difficult because the evidence is conflicting. It would seem that in some cases new milk injected into a vein undergoes coagulation and by the immediate plugging of the veins which it induces causes rapid death from mechanical arrest of the circulation. We have reason to know that this has been proved by experiment, and also that on injecting fresh milk into the peritoneal cavity of a narcotized animal, in order to ascertain if there would be absorption of the fluid from the peritoneal surface, absorption of the saline and watery part, with coagulation of the casein in rather a dense layer over the intestinal surface has been demonstrated. These facts would seem to give credence to the statement that milk cannot be safely in-

jected into the system; but there are other experiences that modify that view. In 1854 the late Dr. W. Bird Herapath of Bristol suggested that milk should be injected into the veins of persons in the collapse of cholera; and it is the fact that Dr. James Bovell, of Toronto, did inject milk in such cases in the cholera sheds of Toronto in the same year, acting independently on his own suggestion. Dr. Bovell reported on six cases in which he injected fresh cow's milk, and two of the cases recovered. It was objected by ourselves and by others at the same time that two cases afforded insufficient evidence of a direct advance in practice, and that the quantities of milk transfused—twelve ounces in one case and eight ounces in the other—were too small to give assurance of positive results apart from other influences that were at work and that would account for the recoveries. At the same time the experiences proved that there are circumstances under which milk can be injected into the venous circuit without danger, and that one of those circumstances is a condition when this remedial measure is most demanded and most promising. For the moment we may leave the matter with two suggestions—namely, that the danger which may result from the presence of milk in the veins is not septic, but is from coagulation of the milk and the plugging arising therefrom; and that if this danger could be prevented, very important results might be obtainable from transfusion of milk in collapse of the choleraic type.—Ed. *London Lancet*, Aug. 20, 1892.

**Koehler (F. W.) on an Improved Stethoscope for Use in Auscultatory Percussion.**—While practising auscultatory percussion in the usual manner not long ago, the idea struck me that it would be an advantage to have a percussing apparatus inside the cylinder of a stethoscope. The dentists have an instrument, used for plugging teeth, the principle of which can quite readily be utilized in constructing such a percussion stethoscope. It consists of a cylinder which contains a metal rod, and has attached to one end a rubber bulb by means of a section of tubing. On compressing the bulb the metal rod is driven down, and on relaxing it it is drawn up.

The force of the blow given by the rod is of course dependent on the force exerted in compressing the bulb, and is therefore under nice control. In adapting this mechanism

to the stethoscope only one additional part is necessary, *viz.*, a plessimeter.

This is attached to the margins of the bell of the stethoscope in such a manner that its surface projects slightly. It is, however, so attached that when the stethoscope is pressed upon the body of the subject to be examined, it is forced back, thus allowing the margins of the bell to come in contact with the flesh. The plessimeter remains, no matter what the position of the subject may be, in close apposition to the body. On compressing the bulb of the instrument the metal, or, better, hard rubber, rod is driven down on the plessimeter, and the characteristic sound of the part percussed is conveyed with great clearness to the examiner's ears.—*N. Y. Med. Record*, Aug. 6, 1892.

**Eckfeldt (J. W.) on Polytrichium.**—This is one of the new vegetable remedies and (*Musci*) is an abundant plant of the moss tribe found growing in large mats throughout all portions of North America, in marshy districts. The plant is alterative and powerfully diuretic, and possesses very marked stimulating properties. The taste, at first, is somewhat pungent, but not acrid, with some nauseating action, leaving a not unpleasant taste in the mouth.

**Therapy.**—Polytrichium is principally of service as a prompt and decided diuretic. To gain its speedy physiological action it is best associated with some synergistic renal stimulant or a hydragogue cathartic. The results of this method are beneficially exhibited in ascites or in anasarca. To me an extended use of polytrichium has clearly demonstrated that it largely increases the urinary secretion and reduces the weight of the body within a few days. The drug, therefore, well merits more attention than it has yet received, and its properties should be more thoroughly investigated.—*Med. Bulletin*, Aug., 1892.

**McCall (R. B.) on One of the Uses of Turpentine.**—Some recent experience with this drug may be new to many as it was to the writer. In December, Wm. F., was attacked with what seemed to be icterus: excruciating pain in belly, focussed at umbilicus and intermittent, bowels obstinately confined, urine of normal appearance and sufficient in quantity, temperature and pulse-rate normal. Palpation failed to discover tumefaction or local accumulation of any description.

For relief of the suffering, hypodermatic

injections (morphine sulphate gr.  $\frac{1}{4}$ , atropine sulphate gr.  $\frac{1}{100}$ ) were repeated once or twice in the twenty-four hours, for a few days. As adjuvants, anodyne drops, (spirit. aether. comp., etc.) with counter-irritants to abdomen were employed in vain. At last four-drop doses of spirits of turpentine were ordered to be taken every three hours. In twenty-four hours almost complete relief had taken place; six months have elapsed and there has been no recurrence of the attack. Previous history shows that similar attacks occurred at infrequent intervals.

John J., a tobacco appraiser, began to have pain in left loin extending forward toward umbilicus, fixed and intermittent, becoming aggravated in evening, necessitating the semi-recumbent posture during night. Three years before, his side had been injured, and it was thought present attack was due in a measure to that fact. Purgatives, diuretics, and anodynes given, afforded only temporary amelioration. Finally four-drop doses of turpentine were taken at short intervals for several days, resulting in the removal of his disorder. Recovery was perfect and permanent.—*American Therapist*, July, 1892.

**Carter (W. S.) on Physiological Action of Kreatin in Normal and Tuberculous Animals.**—As the result of an extensive series of experiments undertaken on healthy and tuberculous animals, Carter believes that the substance is without any effect on the latter. He believes that in the experiments reported by Dixon and Zuill (*Times and Register*, Sept. 28, 1891), where kreatin was supposed to have the power of causing a reaction similar to tuberculines as faulty, because he believes that they mistook the normal evening rise of temperature for the reaction. In this class of diseases there is usually such an evening rise, and the injections of kreatin made by D. and Z. were all made towards evening. No therapeutic value can as yet be attached to the procedure.—*Therap. Gazette*, Aug. 15, 1892.

**Dorland, (W. A. N.) on Method of Using Apioline.**—Apioline may be looked upon as the most efficient emmenagogue at our disposal, but in order to secure the best results it is essential that it be administered in the proper manner. Its use is especially indicated in those cases of amenorrhea consequent upon a general anemia; either that form associated with exhausting discharges, incipient phthisis,

chlorosis, or other depraved conditions of the system, or that due to the constitutional disturbances arising from a change in the climatic influences, such as is frequently encountered in young girls recently landed in this country. Particularly is its use in the last-named class of cases attended with very satisfactory results. In all of these cases it is well to combine the drug with some preparation of iron. Either Blaud's pill or the compound iron pill of the U. S. Pharmacopœia should be given uninterruptedly until a few days before the expected appearance of the menses. Then continuing the iron, apioline in five-minim capsules should be exhibited three times daily, and continued until the appearance of the flow. This procedure may be repeated at the next menstrual epoch, the iron being continued during the interval. At the same time by the use of proper laxatives the bowels should be kept previous and the entire digestive tract maintained in a good condition. If administered in any other way the full benefit of the apioline cannot be secured, while by the method suggested its employment must give satisfaction.—*American Therapist*, July, 1892.

**Peabody (G. L.) on the Dose of Nitro-Glycerine.**—At a recent meeting of the Practitioners' Society, Peabody narrated the histories of two cases in which the dose was far above that usually laid down in the text books ( $\frac{1}{10}$  grain.) One patient with diffuse nephritis, mitral insufficiency and arterial sclerosis gradually ran up to two grains every two hours. This quantity alone controlled his symptoms and was without any bad effect.

The second case was one of Bright's disease with pulse of high tension, occasional attacks of profuse and painful vomiting. In this instance the dose was run up to one grain every three hours, day and night, for several weeks. The pulse improved in tension very much, but occasionally it would return to its original tension and then he would have attacks of persistent vomiting, lasting perhaps three days, and controlled only by enormous doses of morphine administered hypodermatically. During the vomiting attacks the nitro glycerine was administered in the same doses subcutaneously.

It was a curious fact that some people could not take even  $\frac{1}{10}$  of a grain of nitro-glycerine without unpleasant effects.—*N. Y. Med. Record*, Aug. 20, 1892.

**Shoemaker (J. V.) on Europhen.**—Europhen results from the action of iodine upon isobutylorthocresol in a solution of iodine of potassium. The product appears in the form of a fine, soft amorphous powder, slightly resinous to the touch, of a little yellow color, destitute of taste and having a faint, not unpleasant odor which recalls that of saffron. This odor is almost entirely lost when europhen is made into a mixture or solution. Europhen is insoluble in water and glycerine, soluble in alcohol, ether, chloroform and fixed oils. When exposed to a heat of 160° F., europhen thickens and at 230° F., is converted into a clear brown fluid. The specific gravity of europhen is five times less than that of iodoform and half that of iodol. The body is easily decomposed by light and heat. It should, therefore, be kept in a dark, dry, and cold place, and its solutions be made at a low temperature.

The average proportion of iodine contained in europhen is 27.6 per cent. A small precipitate, consisting of an organic iodine compound and soluble in water, forms from solutions of europhen. It is likewise present in the dry powder. A very small percentage of free iodine, formed during the drying and which cannot be removed from the product, is present in europhen. Solutions of europhen in alcohol and ether slowly liberate small amounts of iodine. Europhen should never be mixed with fat combined with starch. It is incompatible with metallic oxide and the salts of mercury. Fats free from starch are good excipients for europhen, and lanolin is particularly appropriate since the large amount of water which it is capable of taking up promotes the liberation of the soluble iodine compound.

The remedy has the same general application as aristol.—*Four. Am. Med. Assoc.*, Aug. 6, 1892.

**Squibb (E. R.). Note on Solutions of Hydrogen Dioxide, or Peroxide of Hydrogen.**—A ten-volume solution is about as strong as is ever needed in medicine, and such a solution, if fairly pure, can be transported, kept, and used without any special difficulty, though with a continuous loss of strength, at all seasons of the year in temperate climates, with the exception of occasional bottles which decompose from some accidental cause. But in hot climates and in hot weather a rapid decomposition is the rule, and the

agent is only to be trusted when freshly made.

Solutions of about three-volume strength are needed for gargling and of about five-volume strength for spraying, and they are more frequently required stronger than weaker. If the market solutions be diluted by the labels—fifteen volumes—so as to get such strengths, they will be only from one half to two thirds of the supposed strength, and too weak to be effective. It must be regarded as very unfortunate when so important a medicinal agent is so badly managed through trade influences.

The hydrogen dioxide of any solutions above one or two volumes' strength is very easily decomposed by contact with albuminoids, and, as its activity in use depends upon this decomposition in contact with the secretions and excretions of the surfaces to which it is applied, the weak solutions which do not so decompose on contact must be nearly useless.

The presence of a free acid is absolutely necessary in all solutions of hydrogen dioxide, since without this decomposition is immediate; but much free acid protects no better than a little, while it renders the solution and its dilutions hurtfully irritant to diseased and sensitive surfaces. All the solutions examined for this note are more acid than they need be, but in the first two makers the excess is inexcusably great and more than three times greater than the others. Otherwise all are practically and sufficiently pure.

Much stress is laid by all the manufacturers upon their products being harmless, and they certainly justify this claim; but when diluted for use by their fifteen-volume labels they are often also useless. To obtain the best effects the solutions should always be used as strong as they can be well borne, and as frequently as is practicable. Any amount that is incidentally swallowed can never be hurtful, but may be useful.—*N. Y. Med. Jour.*, Aug. 6, 1892.

**Liégeois on Benzoate of Soda in Therapeutics.**—Liégeois has written an exhaustive paper on the value of benzoate of soda in therapeutics; he considers this agent as of the greatest importance in the affections below named, provided that it is given in large doses. The pain, dysphagia, and inflammation of the pharynx in the common sore throat are favorably modified and cured in two or three days by the administration of one drachm in children

and three drachms in adults of benzoate of soda daily. In *diphtheria* it is certainly of service either internally or in insufflation, but is not equal to applications of salicylic acid. In *laryngitis* and the ordinary *acute bronchitis* M. Liégeois considers it as a good expectorant when given at the onset; he prescribes it as follows:—

Benzoate of soda, 3 j;  
Tinct. of aconite, ℥.xx;  
Cherry laurel water, 3 j;  
Syrup of tolu,  
                  codein, } 3 ij;  
Water, 3 ij.

To be taken in the 24 hours.

Associated with tannin, benzoate of soda gives good results in *Bright's disease* if persevered in.

Benzoate of soda, } 3 iss;  
Tannin,  
Ext. of gentian, q.s.

Divide into 100 pills—6 daily.

Given in small doses in *uric acid gravel* it transforms the insoluble urates into soluble hippurates, and thus eliminates it from the urine. As a *chologogue* benzoate of soda occupies the first rank; he associated it with salicylate of soda and rhubarb.

Benzoate of soda, }  
Salicylate of soda, } 3 j;  
Rhubarb (powder), }  
Nux vomica do., x grains.

Divide into 20 powders—two daily.

—*London Med. Press*, Aug. 24, 1892.

**Brunthayer (F. P.) on Intolerance to Potassium Iodide.**—During my school-days I suffered with asthenopia, following an attack of measles. Various remedies having been tried without relief, it was decided to try potassium iodide, a then comparatively new therapeutic agent that was being vaunted as a panacea for all the ills to which flesh is heir. The prescribed dose contained about five grains of the salt. After the second dose, coryza set in and became more intense as I persisted in the continuance of the drug, so that a handkerchief would be saturated in a short time. There was pain across the bridge of the nose, as if it were placed in a vise and gradually compressed. Profuse lachrymation occurred, with a severe itching pain in the orbits, pain and ringing in the ears, and a feeling of pressure in the temporal regions. There was also profuse salivation, with congestion of the fauces, pharynx, and larynx. The involvement of the larynx was so profound as to embarrass respiration. It seemed that there was not a bone or

joint in my body that did not share in the pain.

The acme was reached on the second night after commencing the ingestion of the drug (which was persisted in), when it seemed that I suffered the torments of the damned. Sleep was out of the question. By morning the symptoms rapidly ameliorated, and, faithful to my charge, I consumed the four-ounce mixture, but there was no visible improvement of the asthenopia. On another occasion, following the ingestion of two or three three-grain doses of the drug at night, I was aroused from sleep and was obliged to arise to avert threatened suffocation. To the present day I manifest the same or even greater intolerance to the drug.

In my practice I have met with but one marked case of intolerance to potassium iodide.—*Phil. Med. News*, Sept. 3, 1892.

**Kerr (Norman) on the Treatment of Delirium Tremens.**—The author asked if delirium tremens was a morbid state which was the issue of neurasthenia, or an effect of alcoholic poisoning? He believed it to be the latter, and that the disease arose from the cumulative specific action of the poison on the cerebral tissue through the alcoholization of the blood. Acting on this belief, he had aimed at eliminating the poison from the brain and nervous system, leaving the healing power of nature to do the rest. This was the view taken in 1854 by Dr. Alexander Peddie, who administered antimony. Dr. Kerr, however, had found liq. am. acet. satisfactorily fulfil the conditions most favorable to cure. The main point was to avoid the administration of alcoholic liquors and all narcotics. The best hope of cure lay in natural exhaustion inducing sound refreshing sleep.

The different results of narcotic and non-narcotic treatment were exemplified in the case of a publican, who, in his second attack was treated with opium and the bromides, and in his third attack only with liq. am. acet. In the former seizure, the patient, a publican, aged forty-eight, even after sleep, was so heavy, unrefreshed, and then violent, that it took four men to control him, and to save his life he had to be put in a padded room in the workhouse, where he raved till exhaustion procured natural sleep, his only beverage then being coffee.

In the latter seizure, two years afterwards, he was treated at home, the only

medicine being liq. am. acet., at first in drachm doses every hour, milk, beef-juce, broth, and coffee were frequently given. In about seventy hours he had a sound sleep for four hours, followed in four hours more by a spell of twenty hours' sleep. The latter attack was complicated with an epileptic explosion. The recovery was quicker than from the preceding attack.

These were both typical examples of the graver form of delirium tremens. By a reliance on so safe a sudorific as liq. am. acet., and suitable nutriment, we best fulfil the conditions of cure, as we thereby give the *vis medicatrix* "a fair field and no favor."—*Eng. Med. Press*, Aug. 10, 1892.

**Eccles (A. S.) on Bilious Headache and its Treatment by Massage.**—Bilious headache, though generally regarded as of central origin, is apparently induced by peripheral irritation of the gastric nerve endings of the vagus.

Close observation of fourteen cases under treatment by rest and massage point to uniformity of symptoms in support of this view, confirmed by the physical signs in the abdomen before, during, and after a paroxysm of migraine, and further confirmation is afforded by the results obtained by the use of the salol, rhubarb, and Günzberg's tests. The clinical features of thirty-two cases subjected to a more or less searching inquiry bear out the opinion of the author that the headache is induced by: 1. Irritation of the vagus endings in the stomach by a toxic substance due to enfeebled digestive activity. 2. Absorption of the alkaloid, whose action on the nervous system is allied to that ascribed to choline.

The locality of the headache appears to be identical with the distribution of the nerves in connection with Arnold's branch of the pneumogastric, the irritation of the gastric fibres being reflected or referred to the sensory fibres of the pneumogastric in the head (auditory branch). During the paroxysm there is dilatation of the stomach and paralysis of peristalsis in the stomach and intestines.

The treatment adopted is:

**Dietetic**, to avoid giving the stomach and liver more work than is absolutely necessary.

**Rest** in the recumbent position, to avoid overtaxing the nervous system.

**Massage** of the abdomen to favor the circulation through the liver and gastro-intestinal viscera, to mechanically propel the

contents onwards and to increase the muscular action of these organs, improving secretion at the same time.

*General massage* to aid the nutrition generally of the tissues and induce rapid interchange between the tissues and blood and lymphatic systems.—*Eng. Med. Press*, Aug. 17, 1892.

**Maynard (F. P.) on Inguinal Colotomy: A Suggestion.**—That there are advantages as well as dangers in dividing the bowel in inguinal colotomy, and invaginating and sewing up the lower end after washing the fæces out, is, I believe, admitted even by those who never do it. Their objection to completing the operation in this way is based upon a case having occurred in which, the gut being twisted, the wrong end was sewn up and dropped back, with, of course, a fatal result; and Mr. Christopher Heath admits this to be a formidable argument against the practice in question.

But a method has occurred to me of obviating such a danger, though yet I have had no opportunity of practising it upon the living body.

In lumbar colotomy, when the gut is not much distended and cannot easily be found, it is usual to distend it with air or water pumped in *per anus*. Why should not the same proceeding be adopted in inguinal colotomy to enable the operator to decide which is the lower end of the bowel? With the gut held between his finger and thumb the distension on one or the other side would soon prove it. A bougie might even be passed up in cases in which ulceration, etc., did not bar its use. The fæces would usually, of course, have to be washed out from the divided end, though, as the danger of doing this with an open peritoneum is not inconsiderable, it should be done *per anus* if possible. The objection that mucus may accumulate of course remains, but will it not accumulate nearly as much if a really good spur is provided? And considering that short mesenteries, and therefore deficient spurs, are not of infrequent occurrence, I think the suggestion deserves a trial, as tending to remove a great danger in the more radical operation.—*Brit. Med. Jour.*, Aug. 27, 1892.

**Andrews (E.) on the Powerful Effect of Sulfonal in Arresting the Cramps of Fractured Limbs, and Reflex Spasms from other Causes.**—My first observation was upon a case of

painful cramps from a recently fractured femur. Morphine relieved the patient as long as he could keep awake, but as soon as he became drowsy the cramps returned. On changing to sulfonal in fifteen-grain doses the spasms were completely arrested both in the waking and the sleeping condition. Repetition of the treatment in other cases of fracture showed always the same result.

A gentleman in a railroad accident received a slight fracture of the spine without any compression of the cord. He was harassed whenever he fell asleep by cramps of the intercostal muscles adjacent to the injured vertebra. Sulfonal in fifteen-grain doses arrested the trouble completely.

I may remark here that the drug is slow in its action, and where the cramps are only nocturnal, it is necessary to give either a large dose two or three hours before the sleeping time, or else to keep up the effect by using moderate doses three times a day.

I found one physician using this medicine to arrest the spasms of ejaculatory muscles which cause nocturnal emissions of semen. He gave six grains three times a day, and claimed excellent results. At his suggestion I tried it with good success, increasing the dose, however, to eight grains.

From analogy I think the remedy will act well in cases of premature ejaculation in copulation, but I have not yet tried it for that purpose.

I have used sulfonal to arrest two cases of obstinate hiccough.

A gentleman was troubled for many years with nocturnal cramps of the legs and thighs, increasing slowly as his years advanced. Fifteen grains of sulfonal taken before retiring always prevented the spasms. After two months he found that a single dose would prevent the trouble for nearly a week. In about ten weeks more the course of the trouble seemed to be cured, so that he has now been a long time without requiring or taking any of the remedy.

A vigorous young man, engaged in superintending the construction of a building, fell thirty-two feet, striking obliquely on a slope of timber, causing a severe contusion of the right sciatic nerve, without fracturing any bone. The thigh and leg of the injured side kept up a constant and painful jerking motion, resembling somewhat the movements in chorea. Two



doses of sulfonal of fifteen grains each completely arrested the distressing movements.—*Four. Am. Med. Assoc.*, Aug. 27, 1892.

**Walbridge (S. P.) on the Mechanical Treatment of Chronic Rheumatism.**—After giving the clinical history of several cases and the application thereto of this mode of treatment, the author combats the old idea that chronic rheumatic joints always need rest. On the contrary, he maintains that in many instances motion is preferable. He adds: What physiological effects are produced. The primary effects are upon the joints, muscles, and nerves. In the joints stiffness, adhesions, and contracted tendons are broken up and got into proper condition for absorption. The secondary effects are produced upon the circulation and lymphatic system. The muscles and nerves are surely elongated, heat must necessarily be involved by the manipulations, changing the molecules of the muscles from an inactive state to an active state, causing internal work setting up molecular changes in all the surrounding tissues. The circulation and lymphatic system are stimulated. By stroking in a centripetal direction the lymph and venous currents are increased, altering the whole process of nutrition. The waste material is carried away by increased action of the lymph and circulation, and new nourishment is more readily carried to all the parts feeding them, and enlivening the whole organism.—*St. Louis Med. and Surg. Jour.*, Aug., 1892.

**Le Fevre (E.) on Treatment of Burns and Scalds.**—In the treatment of burns and scalds the surgeon will certainly not be slow to accept a substitute for the carron-oil mixture. It is certainly a very dirty and disagreeable application, and produces no better results than many other things that might be used. Perhaps the most sensible dressing, and the one which best meets the requirements, excluding the air and relieving pain, is the rubber tissue. It is cheap, readily applied, and meets all the requirements. The burned surface should first be cleansed with a tepid carbolic solution and all blebs punctured, after which the rubber tissue, which has previously been soaked in a solution of carbolic acid, should be applied as snugly as possible; over this there should be a layer of absorbent cotton and a roller bandage. We have thus an aseptic dressing

which yields the best results attainable in this troublesome class of cases.—*Cincin. Lan. Clin.*, Aug. 27, 1892.

**Flick (L. F.) on Treatment of Tuberculosis by Iodoform Inunctions.**—While my results with this treatment have only been invariably good in those cases which had not advanced to the breaking-down stage, I have had some good results from it in cases that had gone to the second and third stages. In these latter cases, however, I always use large doses of creasote along with the inunctions. Cases in which there is a very large amount of broken-down tissue do not seem to be influenced by the treatment at all.

The formulas which I use in the inunctions are:

B	Iodoform.....	3 i
	Ol. Rose.....	gtt i
	Ol. Anise.....	f 3 i
	Ol. Morrhuæ.....	f 3 ii
vel	Ol. Olivæ.....	f 3 iii M.

Iodoform is much more soluble in cod-liver oil than it is in any other oil. There is some objection, however, to the smell of cod-liver oil, and for that reason I sometimes use the olive oil. Another objection to cod-liver oil is its instability, and the instability of the solution of iodoform in it. If the cod-liver oil is rancid, the solution will at once turn black, and even when it is fresh the solution will turn black in a week or two.

When I use the combined treatment of iodoform inunctions and creasote internally, I begin the creasote in one drop doses three times a day and gradually run it up to fifteen drops three times a day in hot water.—*American Therapist*, July, 1892.

**Sanger (F. D.) on Prophylactic Therapeutics as Applied to Tubercular Sputum.**—Let every infected individual understand that a thorough disinfection of his own sputum not only adds materially to his chances of recovery, but also to the safety of his friends and those about him; that the only safe repository for his sputum is in some vessel or cup which can be boiled or otherwise subjected to heat; that he must not expectorate upon the floor, carpet or bed covering; that his handkerchief is an especial dangerous receptacle; a beard is also objectionable inasmuch as it is apt to become soiled with the expectorated material.

Teach the relatives, friends, or whoever have the care of the tubercular individuals,

the same lesson of scrupulous cleanliness so far as the sputum is concerned ; that the discharges from the bowels should also be disinfected if the patient has diarrhœa ; that they should not sleep in the same room with an infected person ; nor use the same knives, forks, spoons, etc., if it can be avoided ; in any case, such articles should be boiled. The laundry of consumptive persons should be boiled before going to the general wash, if it can not be done separately.

Teach free ventilation, for dispersion of the bacilli which may yet find their way into the respirable air of rooms, even when strict precautions are taken, greatly militates against the possibility of infection.

The apartments occupied by tubercular patients should be frequently cleansed and disinfected. Do not permit tubercular mothers to nurse their offspring ; nor should infected persons be allowed to kiss the well.

Infected mothers should as far as possible intrust the care of their children to the well ; hence the necessity of great care in the selection of nurses and servants.

All precautions which interfere with the intimate relations between members of the family must be annoying, if not positively odious, to most people ; but if the facts are stated unreservedly and without circumlocution, few will be found unwilling to acquiesce. How many mothers are there who will not make any sacrifice requisite to the welfare of their children ?

In hospitals the requirements of thorough disinfection are easily met. In those institutions where many tubercular cases are treated, the question of isolation of such cases naturally arises. I believe, so far as it is practicable, it should be done ; for while the necessity of isolation diminishes in proportion to the degree of cleanliness, still, the safety of persons whose lungs have been injured by previous disease would be more absolute if tubercular patients were treated in separate wards.

In large hospitals grouping of patients is desirable ; then, too, the persistent cough of the consumptive patient, especially at night, is objectionable in the general ward.—*Maryland Med. Jour.*, July 23, 1892.

**Franc on Treatment of Pneumonia by Injections of Turpentine.**—M. Franc reports a case of pneumonia of very grave type cured by subcutaneous injections of turpentine. The patient, a

woman of fifty, was treated by local bleeding, digitalis, etc., without effect apparently ; there were large râles at the base, and fine crepitation over the remainder of the lung, the expectoration was purulent. Four injections of turpentine were practised as a last resource, and on the following day a great improvement took place in the local condition as well as the general, and continued thus to convalescence. The usual hypodermic abscesses produced by the injections gave but little trouble. M. Thiery has used the same agent in the treatment of puerperal septicæmia ; out of thirteen cases he reported twelve cures. The injections were made in the abdomen.—Letter to *Eng. Med. Press*, July 27, 1892.

**Hall (A. L.) on Creosote in Phthisis.**—The writer has employed the following formula with good results :

B.	Pure beech-tar creosote, Merck's	3 j.
	Fl. ext. gentian.....	3 ij.
	Comp. tincture of cardamon....	3 j.
	Alcohol.....	3 ij.
	Simple syrup.....	q. s. ad. 3 viij.
M. Sig.:	One teaspoonful as directed.	

After toleration is established the quantity of creosote and gentian is gradually increased in the proportion given above.—*N. Y. Med. Record*, Aug. 6, 1892.

**Carothers (R.) on Arsenite of Copper in Summer Complaint.**—It is the chronic stage of which I wish particularly to speak, when the disease has travelled down into the lower bowel, the stools small, containing mucus, tinged with blood, producing pain and tenesmus, the prostration, vomiting and fever having subsided.

It is in this stage that such excellent results are obtained from the use of arsenite of copper, given by the mouth and thrown into the bowel as an enema.

I have seen cases of chronic or sub-acute dysentery, which have been running weeks, relieved in a few days by the use of arsenite of copper, prescribed as above. In the chronic as well as the acute stage the importance of diet must not be lost sight of, but it will not be necessary to enforce so rigid a course. It has been my custom, if the case be an infant at the breast, to lengthen the intervals between nursing from three to five hours, and in young children to confine them for a few days to an exclusive milk diet, with intervals between the feeding of from four to six hours.

I have frequently used the arsenite of copper as an intestinal antiseptic in acute

complaint with good results, but my experience tells me that it is especially indicated in chronic or subacute trouble located in the lower bowel.—*American Therapist*, July, 1892.

**Fussel (M. H.) on Salol on Diarrhœa.**—It has been the author's practice to administer salol in 5-grain doses, combined with 10 grains of bismuth and 2 drachms of chalk mixture, as in the following prescription :

R Salol, 3 i;  
Bismuth. subnit. ʒ ii;  
Mist. cretæ, q.s. f ʒ iii. M.

Sig.—Two drachms every two hours.

Children over one year of age are given 3-grain doses of salol.

If the attack is severe, directions are given to take the same dose every hour until the diarrhœa is checked.

F. concludes as follows:

1. Diarrhœa due to dietetic errors, and that which is common in adults and infants in summer, is well controlled by the administration of salol and bismuth or chalk.

2. Opium is rarely necessary where salol is used.

3. Salol controls the abdominal pain equally as well as opium.

4. It is perfectly safe, having no bad after-effects.

5. It is especially useful in the treatment of the diarrhœa of children.

6. It is of no value in dysentery.

7. It constantly corrects the fœtor of the stools.—*Therap. Gazette*, Aug. 15, 1892.

**Ball (A.B.) on the Treatment of Amœbic Dysentery.**—In the course of a lengthy article on the symptoms, complications and treatment of dysentery, the writer says :

My own experience with this treatment (rectal injections of quinine solutions) is limited to the following case, which is particularly interesting as showing that, while amœbic dysentery is commonly a tropical affection, it may originate even as far north as Winnipeg, Canada. The patient, a Scotchman, who had lived in that city for two years, was attacked last August with a simple diarrhœa, which, after two or three weeks, was followed by dysenteric symptoms,—mucus, bloody discharges, tenesmus, and tormina. He was confined to bed for a month with this acute attack, which the patient says was unaccompanied by fever, and then for the next four months the diarrhœa was followed by constipation in alter-

nating periods of two or three weeks' duration. In April, after a month's freedom from diarrhœa, he left Winnipeg to take a steamer at New York for Glasgow, Scotland. On the way he had a relapse, and when admitted to New York Hospital, April 27, was having from three to six stools daily, containing mucus, no blood, fœcal matter, and a large number of amœbæ. He was put upon a milk and meat diet, with salol in 5-grain doses three times daily and an enema of two quarts of quinine solution 1 to 3000, later 1 to 5000, morning and evening. Under this treatment the stools, which were examined almost daily by Dr. Frank Ferguson, the pathologist of the hospital, did not diminish in frequency, but the amœbæ gradually disappeared, first the live ones, then even the dead ones. On May 5, salol was changed for bismuth subnitrate, and from this time the diarrhœa rapidly ceased. For the past ten days there have been no stools except after the enemata, no more amœbæ have been found, and the patient is regaining his strength; but the case is too incomplete to permit any conclusion as to the final result.—*Therap. Gazette*, Aug. 15, 1892.

**Broadbent (R.) on Toxicity of Exalgine.**—In view of the fact that exalgine has recently been so highly recommended for neuralgia and allied affections—and I can add my testimony to the fact that it is frequently of great service in facial neuralgia and toothache—I think that the following case should be recorded as illustrating the dangerous symptoms that are sometimes met with. One remarkable fact with regard to this case is the rapidity with which the symptoms occurred, only a few seconds elapsing between the taking of the medicine and their onset.

A patient (male) aged twenty-six, suffered from neuralgia over the left temporal region for a week. He was inclined to be anæmic. He was ordered a dose containing four grains of exalgine, to be repeated in two hours if unrelieved; and if neither dose gave ease he was directed to take two doses (containing eight grains in all) the following morning after breakfast. The same evening the patient took one dose and obtained relief from the pain, but, at the same time, complained to his wife of feeling giddy, as if drunk. Next morning, at 4.30, feeling a slight return of the pain, he took the rest of the medicine, which contained twelve grains of exalgine. He im-

mediately became dazed, clutched at the bedstead, but fell prostrate on the floor, where he remained quite unconscious for half an hour, and during this time frothed at the mouth. On my arrival at this juncture I found him on the floor making a feeble effort to vomit. The pulse was feeble and slow; eyes closed; pupils natural. He was with difficulty got to answer questions when he complained of pain in the region of the stomach and noises in the head. One tenth of a grain of apomorphia given hypodermically caused him to evacuate the stomach. Subsequently one-five-hundredth of a grain of strophanthin with ten minims of ether were administered in the same way, and the man slowly rallied. The pains in the stomach disappeared first, but the noises in the head remained for some time. Later the patient could not remember events which occurred half an hour subsequently to his regaining apparent consciousness, and during this time he was constantly yawning. He had never had a fit in his life.

Twelve grains of exalgine must be regarded as an excessive dose, but if the toxic dose is three grains for every two pounds of body weight, as stated by some writers, these alarming symptoms ought not to have occurred.—*London Lancet*, July 30, 1892

**Huddleston (J. H.) on Three Cases of Malaria in Children Treated Successfully by Methylene Blue.**—July 7th, three sisters, aged respectively ten, seven, and five years, came to the Medical Dispensary of Gouverneur Hospital with this history: For about two weeks all had been suffering every second day with chills and fever. The chill, severe enough to cause general shaking and chattering of the teeth, began usually near 9 A.M., and lasted about an hour; there followed a fever and then a cold sweat. Toward evening they recovered, and the next day they felt perfectly well. The day following, the attack was repeated. The children were Russian Poles, and had reached this country with their father and mother about a week before the illness began. The mother was similarly ill three days, and then recovered untreated. The father remained well. The children had always been well before coming here.

Physical examination showed them to be fairly well developed and nourished, but all somewhat pale; lungs and heart in each presented nothing abnormal. In the oldest the upper limit of the splenic dulness was found

at the eighth rib in the anterior axillary line, but no tumor was palpable. In the younger children neither percussion nor palpation revealed any enlargement. This was on a day between the chills. The next morning at 8:30 I saw the children, and found the youngest apparently convalescent from an attack which, by the mother's account, had lasted most of the night. The other children were well; all the temperatures were normal. At noon I found that both older children had had chills in the forenoon, and were then in the fever; the temperature of the oldest was 105.2° F., and of the second, 102.4° F. Cover-glass preparations of the blood from all three were made, and the plasmodium seen in that from the oldest. In the others nothing abnormal was noted. The same evening the administration of methylene blue was begun, one capsule containing a decigram being given to the oldest every three hours, to the next every four hours, and to the youngest every five hours. This was continued regularly for four days, except that the medicine was not given at night when the children were asleep. The temperature was taken at noon daily, and found normal regularly, except that on the second day the second child had a temperature of 100° F., with no other symptom. The urine, colored blue, was passed without difficulty, and in sufficient amount in every case. Examination of the sediment gave a negative result. All medicine was stopped after the fourth day; the blood was again examined, and nothing abnormal noted. Since then there has been no relapse.—*N. Y. Med. Record*, Aug. 13, 1892.

**Sexton (L.) on Treatment of Acute Nephritis.**—After recounting the time-honored procedures, the writer says:

With lactate of strontium I have failed to reduce the albumen very materially, or to notice the beneficial results recorded by Prof. Dujardin-Beaumetz, who says that the albumen was reduced three fourths in his case after four days' trial. I have one patient who has been taking the lactate of strontium for four weeks, taking fifteen grains three times daily, also drinking one gallon of the Stafford Springs water each day; during this treatment the albumen has decreased from twenty-five to fifteen per cent., but increases as soon as treatment is stopped. I think if the patient could have taken two gallons daily, with a skimmed milk diet, the result would have

been different or more marked in improvement.

Four-grain capsules of fuchsin three times daily have reduced the quantity of albumen in several cases; it has the advantage of being well borne; also has slightly antiseptic properties—should always be given in capsule to keep from staining the teeth.—*Va. Med. Month.*, Aug., 1892.

**Poisoning by Ichthyol.**—The increasing employment of ichthyol in the treatment of various conditions, such as sprains, lymphatic enlargements, and certain diseases of the skin, renders a full acquaintance with its powers as a medicinal and toxic agent necessary on the part of the general practitioner and specialist. It is probable that there are few drugs which, applied externally, can exert so favorable and rapid an effect as ichthyol. Many physicians, who have never employed it, can scarcely be made to believe the rapid changes which take place in diseased tissues under its free and proper employment.

We have already pointed out elsewhere the singularly good results which follow its inunction about joints which are inflamed by gout and subacute rheumatism. In association with salicylates, there is certainly no application which gives as great relief to the patient as does ichthyol. That the drug is capable of producing poisonous symptoms seems to be proved by the report of an Italian physician, Dr. Bergerio, who has employed the drug as an intrauterine injection after curetting the uterus. Shortly after the injection, the patient complained of a fishy taste in the mouth and of the odor of the ichthyol. The pulse became exceedingly rapid, and symptoms of collapse came on with great rapidity. These symptoms, however, disappeared in about twelve hours. Naturally, Bergerio concluded that this case of intoxication was due to the absorption of the drug from the exposed surface of the uterus, and he reports that his colleague, Peroni, observed in another case, vomiting, headache, convulsions, and diarrhoea after the employment of ichthyol in a patient who was suffering from prurigo.—Ed., *Therap. Gaz.*, Aug. 15, 1892.

**Patterson (R. L.) on Treatment of Rhus Poisoning.**—The writer says that that glyco-phenique, applied according to the following formula, gives greater relief than anything else in cases of poison-

ing by rhus toxicodendron. It will, he says, relieve the severest case within two hours, and cure it in half the time required under any other method.

℞ Glyco-phenique (Déclat),  
Olive oil.....aa equal parts.

To be kept in contact with the affected parts by means of absorbent cotton.

If the eyes are inflamed and swollen, the following collyrium should be used:

℞ Acidi borici.....gr. xij.  
Aq. camph.,  
Aq. destillata.....aa ʒ ii.

Sig.: Drop into the eyes frequently.

—*N. Y. Med. Record*, Aug. 6, 1892.

**Banerji (U.) on Pyrogallic Acid.**—

On May 15th last, at about 3.30 P. M. two patients, husband and wife, took pyrogallic acid. From the statement of the husband and from the appearance of the bottle I consider that much more than a drachm of the acid was taken by each. The man told me that he swallowed two handfuls of the poison. On arriving at the house at 4 P. M. I found the male patient under the influence of liquor, and taking a bath under a water-tap. I administered an emetic to each, mustard and hot water. The male vomited, but the female did not. The vomit appeared to consist of water, mustard, mucus, and a white matter looking like pyrogallic acid which I at the time held in my hand. Finding that the patient did not complain of anything, I simply ordered twenty drops of dilute nitro-muriatic acid to be taken every two hours, and at night six ounces of olive oil to be taken in three equal doses. Next morning (the 16th) I found the patients in their usual good health, but in both cases the tongue was stained deep black. The urine and stools passed overnight were quite normal. I did not order any medicine. On the 17th I took the following notes from the male patient (the female, I might have mentioned, never complained of anything abnormal): "Sensation of drowsiness coming on at intervals; the patient likens it to that produced by opium. There is nausea, but no vomiting; slight paroxysmal numbness about the extremities and face; slight palpitation and dryness of the throat; tongue moist, still black; no abnormal sensation in the abdomen; passed a natural stool in the morning; heart sounds normal; pulse 62 in the minute; urine normal; perspiration rather scanty; no headache; slept well." Since

the above date the patients have been continuing in their usual good health. No one was present to see the acid actually swallowed, but the patients said that they took it in handfuls. The bottle which contained the acid was as large as a Howard's quinine phial; two thirds of its contents had disappeared. In the *Medical Record* (page 49) a case is recorded in which a patient

suffering from psoriasis was poisoned by pyrogallic ointment applied to one half of his body, whilst to the other half chrysophanic acid ointment was applied for comparison. The difference can be explained only by the supposition that the acid acts differently when applied and when taken internally.—*London Lancet*, Aug. 6, 1892.

## REPORT ON GENITO-URINARY SURGERY.

BY R. E. VAUGHAN, M.D.

**Schachner (Aug.) on Studies upon Injuries of the Kidneys, Nephrolithotomy and Nephrorrhaphy.**—The writer reports fifty-three experiments on dogs, and presents the following conclusions:

**INJURIES OF THE KIDNEY.**—(1) The disproportion which frequently exists between the cause and the effect in injuries of the kidney can alone be explained upon its peculiar anatomical structure, its physiological function and the frequency with which this organ is found in a more or less abnormal condition, at the time of the accident.

(2) The external damage offers no safe criterion as to the extent of the internal injury.

(3) However slight the injury may seem, no definite conclusion can be reached as to its extent or its ultimate termination.

(4) In view of the uncertainty which ever surrounds the diagnosis of conditions in regions remote from the ocular inspection or the digital touch, the prognosis should always be guarded.

(5) The sequelæ which frequently attend even trivial injuries should be kept carefully in view in rendering our prognosis and shaping our treatment.

(6) In all operative attacks upon the kidney, the capsule and peri-renal structure should be preserved as carefully as possible, since these not only add to the strength of the purchase, but afford additional protection against hemorrhage and sepsis.

(7) A gun-shot injury amounting to a simple perforation is best controlled by the application of a "purse-string suture" to both orifices.

(8) This may be reinforced by a covering of the peri-renal structure drawn together in a similar manner.

(9) The hemorrhage from superficial lacerating wounds of the kidney can confidently be arrested in the majority of instances by means of a single or double purse-string suture, applied one *cm.* or more from its edge.

(10) The great omentum can frequently be employed as a valuable adjuvant in controlling the hemorrhage and in adding to the safety in many operations upon this organ.

(11) Incised wounds whose aseptic nature is questionable are best treated by tamponade and drainage through the loin.

(12) Wounds of the pelvis should be closed with a double row of sutures, as an additional measure against the formation of a fistula.

(13) Unless the wound of the ureter is singularly slight as compared to the size of the duct, nephrectomy is, as a rule, indicated as the most practical step.

(14) The incision in partial resection for the relief of an injury should be made distant from the contused region to insure the apposition of two healthy renal surfaces.

**NEPHROLITHOTOMY AND NEPHRORRHAPHY.**—(1) The choice of the incision in all operative attacks is largely to be determined by the nature of the condition and the character of the operation.

(2) Where the operation is of the character of a nephrotomy, dependent upon some cystic or suppurative process, the lumbar is the preferable incision.

(3) Whenever the lumbar incision becomes insufficient the space can be enlarged by another incision in a horizontal manner after the precepts of König, or as recommended by Newman.

(4) Unless specially contraindicated by reason of sepsis or other valid causes the abdominal incision should be preferred.

(5) "Early diagnosis and successful treatment go hand in hand." (Newman.)

(6) Procrastination means untold suffering to the individual and the steady increase of the dangers militating against the ultimate success of the operation.

(7) The renal artery can safely and successfully be compressed, rendering not only the operative field bloodless, but adding to the thoroughness of the operation and the chances of its success.

(8) The closure of the wound, unless contraindicated by drainage, should be preceded by a careful irrigation of the pelvis and a thorough removal of all blood clots.

(9) Whenever practicable, an incision through the kidney substance should be given the preference over one performed through its pelvis.

(10) The bottom of a renal incision

should be approximated through deep sutures while the superficial edges are united by a separate row of superficial stitches.

(11) If the kidney has been much disturbed it should be stitched *in situ*. (Jacobson.)

(12) In anchoring a floating kidney it should be replaced as nearly as possible in its natural location.

(13) In a dog the implantation of the kidney between the transversalis and internal oblique muscles is a practicable and feasible step.

(14) In such an instance changes in the organ thus submitted are not sufficient to have any practical bearing upon the success of the procedure.

(15) The feasibility of a somewhat similar step in the human subject is questionable.

## REPORT ON GENITO-URINARY DISEASES.

BY BERNARD E. VAUGHAN, M.D.

**Bell (James) on the Treatment of the Bladder through a Suprapubic Section.**—He refers to the bladder as a frequent seat of tuberculosis, either primary or secondary, and that its favorite site is in the trigone and around the neck of the bladder.

The disease remains for a long time confined to the mucous membrane, and it is only in the advanced cases that the deeper structures are involved. He reports three cases operated upon by the suprapubic section, followed not only by temporary relief from pain and frequent urination, but in two of the cases a permanent improvement up to the time of writing the article, one two years and the other eighteen months after operation. The other case he lost sight of.

In conclusion, he states that this operation, which is neither difficult nor dangerous, and which brings the diseased areas directly under the eye and hand, can be relied upon to give more prompt, more competent, more lasting relief to those very distressing conditions produced by ulceration of the mucous membrane of the bladder in the immediate neighborhood of its outlet, than any other method of treatment known to surgeons.—*Four. Cut. and Gen.-Urin. Dis.*, Aug., 1892.

**Electrolysis in Affections of the Male Urethra.**—Dr. Pearson read a paper on the uses of electrolysis in affections of male urethra. He described the apparatus required for its employment, and the method of employing it in cases of gleet, stricture, etc. He gave a history of seven cases subjected to electrolytic treatment. — Sir William Stokes could not endorse what had fallen from the author in reference to the permanence of the cure of stricture by electrolysis. In fact, after no method of treatment could it be honestly said that a cure had been effected, and in his experience a return was just as likely to occur as after the treatment by internal or external division or gradual dilatation. In the treatment of gleet, Dr. Pearson's experience should stimulate surgeons to give it a full trial. — Mr. Thompson said he had used the method described by Dr. Pearson in gleet with success. But his experience in stricture was not satisfactory, and he had not pursued the treatment. The question was really, Was stricture of the urethra curable? He (Mr. Thompson) had never seen a case where, no matter what method was adopted, he was able to say to a patient, You are cured—that was, that the person could go on without the periodical use of a bougie. He had never met any one who

claimed such a result. Was it attainable by electrolysis? If it was, they ought all to adopt this plan, but until such a claim could be substantiated he did not think that electrolysis had any advantage over some of the simpler methods.—Mr. Swan said he did not believe in the permanent cure of stricture by electrolysis, any more than he believed in the same result by Holt's method, by gradual dilatation, or by any form of urethrotomy. Only last month he had used Maisonneuve's instrument on a gentleman, the possessor of a tight stricture, who had been cured for a time by electrolysis.—Mr. M'Ardle said the only experience he had of the treatment was that he was obliged to use Maisonneuve very frequently on cases of so-called cures by electricity. As to the good effect of the application of the electric current to patches of granular urethritis and small patches of ulceration there could be no doubt; and if large leaden electrodes, carefully guarded, were used, the healing would be more rapid.—Mr. Tobin said the question of a permanent cure of stricture by electrolysis resolved itself into this—Could electrolysis cause the disappearance of cicatricial tissue? His opinion was that it could not.—Royal Academy of Medicine in Ireland—Section on Surgery.—*British Med. Four.*, July 2, 1892.

**Lyndston (G. F.) on Cases from Genito-Urinary Practice.**—The author gives six short histories of rare cases, the last I quote in full. *Acquired syphilis by genital contact in a young child.*—Cases of acquired syphilis in children by means of mediate and immediate contagion from syphilitic nurses are not so rare as to be a novelty. It is exceptional, however, that we have an opportunity of observing a full blown case of secondary syphilis with the primary lesion upon the genitals in a young child.

A little mulatto girl, five years of age, was brought to me by one of my former Charity Hospital nurses who happened to be working under the visiting nurses association of this city, for the diagnosis of a skin eruption. On examination I found a beautifully marked roseola interspersed with an extensively distributed papular syphilide. The hair was beginning to fall in the characteristic patches of alopecia areata syphilitica. The pharynx was typically engorged, and mucous patches were present in the mouth. On examining the genitals, I found an exceptionally well

marked hard chancre in process of resolution. On investigating the history of this case, I found that the child had been infected by direct contact by a negro boy of about eighteen years of age, with whom the child had been left alone on several occasions. The case did well under treatment for several months, but I eventually lost sight of it.—*Pittsburg Med. Rev.*, July, 1892.

**Lyndston (G. F.) on A Phase of Sexual Perversion as Illustrated by Recent Tragedies.**—The writer refers to the Mitchell-Ward affair in Memphis, and the suicide of Dr. Breedlove, and thinks the subject has received altogether too little attention from the medical profession. He thinks that something of the physiology of sexual functions should be taught to young persons, that they may appreciate that abnormal, or even normal, impressions made upon the sexual functions before the period of adult life has been reached, is liable to leave a permanent impression upon the sensitive nervous organization, as a consequence of which the normal receptivity and excitability of the sexual centres and nerves of sexual sensibility may be absolutely destroyed. He classifies sexual perversion as follows:

- |  |   |
|--|---|
| I.<br>Congenital and perhaps hereditary sexual perversion. | <ul style="list-style-type: none"> <li>a. Sexual perversion without defect of structure of sexual organs.</li> <li>b. Sexual perversion with defect of general structure, e.g., hermaphroditism.</li> <li>c. Sexual perversion with obvious defect of cerebral development, e.g., idiocy.</li> </ul>  |
| II.<br>Acquired sexual perversion.                         | <ul style="list-style-type: none"> <li>a. Sexual perversion from pregnancy, the menopause, ovarian disease, hysteria, etc.</li> <li>b. Sexual perversion from acquired cerebral disease, with or without recognized insanity.</li> <li>c. Sexual perversion(?) from vice.</li> <li>d. Sexual perversion from overstimulation of the nerves of sexual sensibility and the receptive sexual centres, incidental to sexual excesses and masturbation.</li> </ul> |

As regards the clinical manifestations of the disease sexual perverses may be classified as: (a) Those having a predilection (affinity) for their own sex; (b) those having a predilection for abnormal methods of gratification with the opposite sex; (c) those affected with bestiality.—*Western Med. Reporter*, May, 1892.

**Tuttle (J. P.) on Gonorrhœa of the Rectum.**—The author states that since the famous experiments of Bonnière, showing the comparative immunity of mucous membranes covered with cylindrical epithelium from blennorrhagic infection, the existence of gonorrhœa of the rectum has been seriously questioned by many observers. The discovery, by Neisser, of the bacillus gono-



coccus, has, however, put to rest all contentions on this point.

He then reports three cases occurring in his clinic, two males and one female, in which the gonococcus was found. They are interesting on account of the few which have been reported, as verified by the examination for gonococcus.—*N. Y. Med. Record*, April 2, 1892.

**A Course of Clinical Lectures on the Diagnostic Significance of Single Symptoms of Urinary Disease (Controlled by Electric Cystoscopy).—**Fenwick E. Hurry. Lecture 2. *Undue frequency of micturition.*

The stimulus upon which the smooth musculature of the bladder contracts may emanate from various sources.

1. Normally, a drop of urine is voluntarily pressed into the prostatic urethra. Here its stimulation of the mucous membrane reflexly releases the striped muscle sphincter, and excites the smooth muscle detrusors to contract.

2. The sensory nerves in the bladder (or ureteric) walls, if stimulated, can themselves cause reflexly, the evacuation of the urine. Thus the mere tension of an overfull bladder is capable of inducing spasmodic contractions of vesical wall. A better example, and one less open to criticism, is noticeable after supra-pubic cystotomy for the curettage of ulceration or for the removal of growth. In these cases the exposure of the nerves in the mucous membrane cause the most urgent desire to micturate, and often violent spasms of the vesical muscle ensue, although the bladder is kept empty by means of efficient drainage.

3. The terminal nerve meshes of the lower urinary organs, of the generative organs and of the lower gut, are so leashed together in the various pelvic plexuses and in the lumbar cord centres, that excessive stimulation of any one set of nerves overflows its corresponding centre to incite action in other and neighboring centres. The bladder can thus be excited to evacuate its contents on extra-urinary nerve stimulation.

4. Cerebral impulses producing vesical evacuation can pass directly to the bladder, though the exact course of the conducting fibres is still a matter of dispute. Thus psychical or emotional disturbances, such as anger, or fright, empty the bladder involuntarily.

The various *abnormal* stimuli to frequent micturition may be grouped without effort under those regions whence normal stimuli arise. 1. Stimuli originating in the urinary tract—chiefly in the vesico-prostatic region. 2. Stimuli arising in extra-urinary regions such as the large gut, male and female generative organs. 3. Stimuli from the higher centres, such as the cerebrum.

True urinary frequency he divides into much and often and little and often.

MUCH AND OFTEN.

The frequency of quantity.	Persistent excess	High S. G.	Sugar - Diabetes mellitus. No sugar but extreme thirst Diabetes insipidus.
		Low S. G.	Albumen - with casts, but without pus or residual urine. { Bright's disease. No albumen, but with residual urine. { Back renal pressure from prostatic atony or direct renal irritation of prostatic origin.
Transient excess (usually diurnal)		Low S. G.	(a) Sexual excess or debility Dietetic idiosyncrasy—tea, beer, etc.
		Clear	(b) Hypochondriasis, hysteria, nervousness.

LITTLE AND OFTEN.

The frequency of irritability.	1. Without obstruction to the stream.	(a) Without pus.	Lithiasis, phosphaturia, oxaluria, dyspepsia. Cystitis of all grades. Catarrhal or tubercular ulceration of the bladder. Various irritants in renal pelvis and ureter, e. g., stone, tubercle.
		(b) With pus	Micturition reflex excited by transient inflammation or congestion of the prostatic mucous membrane, e. g., deep gleet, deep injections, Masturbation.
		(c) Without vesical pus	Stone, stricture (6. F. guage) acute prostatitis, rare bladder stammerers.
	2. With obstruction to the stream	Diurnal.	Enlarged and congested prostate without much residual.
		Nocturnal	Tubercle or cancer of prostate or bladder base.
		Diurnal and nocturnal	Enlarged prostate with residual.

Physical irritability producing the frequency of incapacity and overflow.

The frequency of incapacity	Frequency at night nearly as bad as in day	Obsolete or advanced tubercle of the bladder.
		Advanced interstitial cystitis following { Gonorrhoea. Stone. Enlarged prostate. Pregnancy.
The frequency of overflow	Age: 30-40 onset first noticed in morning	Early spinal atony, e. g., tabes, sclerosis.
	Age: 45-70 onset first noticed at night	Prostatic atony in advanced stage.

**Lloyd (Jordan) on Forty-four Consecutive Cases of Stone in the Bladder, Treated by Operation, without a Death.**—Forty-three cases occurred in males, one in females. The ages of the patients varied from 2 years and 8 months to 72 years; 15 were under 10, 9 between 10 and 20, 7 between 20 and 30, 3 between 40 and 50, 6 between 50 and 60, 2 between 60 and 70, and 2 between 70 and 80.

The calculi were chiefly of three common varieties, viz.: phosphates, 18; uric acid, 10; oxalate of lime, 7; 8 were of a mixed structure, and 1 was a pretty specimen of the crystalline pure triple phosphates. The phosphatic calculi mostly occurred in children, the oxalate of lime in young adults, and the uric acid in the older adults.

The 7 oxalate of lime calculi averaged 57½ grs. each, while the phosphatic stones averaged 175 grs., and the uric acid 188 grs.

Of the 44 operations, 6 were by crushing and 38 by cutting, 19 by perineal lithotomy, and the remainder by the suprapubic operation, which the author considers the best, and destined to succeed all other operations for stone. He describes the operation in detail, and states that the statistics of the high operation, published two or three years ago, giving a mortality of 9 per cent., is monstrously high, and ought not to be over 2 or 3 at the present time.—*Birmingham Med. Rev.*, April, 1892.

**Robinson (Fred.) on Gonorrhœa of the Vesicular Seminalis (Spermatocystitis).**—The author presents the following conclusions:

1. The seminal vesicles are attacked by

inflammation that induces obstruction and causes dilatation.

2. The dilated sacs contain fluids or pus.

3. Gonorrhœa is the principal cause of the disease.

4. The disease of the semen sacs is exactly analogous to those of the Fallopian tubes, and mainly has the same cause.

5. It follows urethritis, and generally exists with epididymitis.

6. It rarely suppurates. But epididymitis also rarely suppurates.

7. It is nearly always diagnosticated as prostatitis.

8. If suppuration occurs, the abscess should be opened, not through the rectum, but through the perineum.

9. The vesiculæ seminales may be swollen quite large, and yet few adhesions exist around them, as I have seen in autopsies. But this exactly resembles hydrosalpinx. Adhesions vary much in both diseases.

10. A hydro-spermatocyst or a pyospermatocyst may recover without medical or surgical interference, just as will a hydrosalpinx or pyosalpinx.

11. To diagnosticate disease of the vesiculæ seminales an examination should be made by the rectum.

12. It is in the semen sacs that we likely have a favorable place for persistent remains of gonorrhœa. Post-nuptial sexual excesses re-excite old gonorrhœa into virulent activity.

13. The dilatation of the semen sacs and their inability to retract, or loss of sphincter power, may account for some cases of spermatorrhœa.—*Med. News*, May 9, 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

**The Uric-Acid Diathesis in Children.**—The subjects of this diathesis are often easily recognized. They have small, restless bodies, and are precocious, excitable, and nervous, at times bright and cheerful, at others quiet and depressed. They sleep poorly and wake early in the morning; they have dainty and capricious appetites. They take cold readily and perspire freely upon exertion. The feet and hands are usually cold. The pharynx is often relaxed and irritable, causing a harsh cough, most troublesome when the child goes to bed. The tonsils and the adenoid tissues of the naso-pharynx are subject to

inflammation, and are frequently found thickened and enlarged. The tongue is coated and the breath foul, and frontal headache is very common. Abdominal pain is common, and is not infrequently located in the right iliac fossa.

When uric acid is being excreted from the system, pain is one of the most prominent symptoms, and may be located in any part of the urinary tract. If the irritation is in one or both kidneys, the pain may be located in the back, passing downward or forward, or it may be felt entirely in the umbilical region. This pain is usually intermitting in character, and may be in-

tense. It is accompanied by nausea and shivering. When the bladder is irritated by the crystals or by the excessive acidity of the urine, the pain is suprapubic and reflected along the urethra to the meatus. The greater the proportion of solid to fluid constituents in the urine, the more marked will be the pain. It is a characteristic of the subjects of this diathesis that they drink moderately but sweat profusely, the result being that the amount of urine passed is small.—Ed., *N. Y. Med. Four.*, Aug. 20, 1892.

**Abram (G. S.) on Death from Fly Bite.**—S. W.—, aged twenty-five, was admitted to the Devon and Exeter Hospital on July 11th, under Mr. Bell, with the following history: He was a compositor by trade. Eight days previously, when at a beanfeast, he was bitten on the proximal phalanx of the left index finger by a fly, presumably a gad-fly. No notice was taken at the time, but the finger began to swell and the wound to ulcerate, and for three days before admission he had had great pain. On admission the man looked very ill indeed. Temperature  $103.6^{\circ}$ ; respiration 60; perspiring freely. On the finger was a yellowish sloughing wound the size of a two-shilling piece; the hand was swollen and oedematous; there was a well-marked cellulitis up the arm; no swelling in the axilla. Examination showed pleurisy at the left base of the lungs. Mr. Bell made free incisions in the arm and wound and ordered copious stimulation; but in spite of all efforts the patient died within eleven hours of admission, apparently of acute septicæmia. Post-mortem examination showed a very fluid condition of the blood and all the organs macroscopically healthy, with the exception of the lungs, which were riddled with very large infarcts and where there was extensive pleurisy at the base.—*London Lancet*, Aug. 6, 1892.

**Paper Money as a Carrier of Infection.**—The possibility of infection being conveyed to a large number of persons by means of paper money has often been suggested, and an examination of the notes of the Bank of Spain current in Cuba which has recently been published by Drs. Acosta and Rossi in the *Crónica Médico-Quirúrgica de la Habana* shows that this form of currency is indeed liable to contain septic germs. The notes chosen for their experiments were some that had been in use for a good while and were such as

represented values of a few pence only. It was estimated that two notes, weighing altogether about fifteen grains, contained more than 19,000 germs of various kinds. Cultures were made in broth, gelatine, and agar, and these were injected into the peritoneal cavity of rats and guinea-pigs, most of which died within twenty-four hours, the post-mortem examination showing signs of peritonitis and congestion of the liver and kidneys. The blood of the heart and peritoneum was made use of to inoculate solid media, in which colonies developed so rapidly that it was impossible to determine their precise nature, many different forms being intermingled.—Ed., *London Lancet*, July 30, 1892.

**The Transmission of Disease by Margarine.**—Some disturbing statements have just been made by two *savants* in Rome upon the question of the transmission of disease by margarine. They affirm that artificial butter, when prepared from the fat of animals which have died of infectious maladies, becomes a dangerous commodity for consumption by the masses, and they base this opinion upon the results of various researches undertaken for the purpose of inquiring into this fact. It seems that the bacilli of charbon, the streptococcus pyogenes, the staphylococcus pyogenes aureus, the bacilli of glanders, severally resist in filtered and non-filtered butter the action of a temperature of  $50^{\circ}$  C. for two hours, or one of  $40^{\circ}$  C. for twenty-four hours. Furthermore, the bacilli of charbon can exist in non-filtered butter for a period of forty-six days, and perhaps longer. All the other germs above mentioned die within a period of thirty days. Thus the risk becomes self-evident of mixing artificial with natural butter, and of employing margarine in the preparation of which care has not been used. The way out of this difficulty proposed by the authors is not to use margarine in the preparation of butter within forty days of its manufacture, this margin of time being fixed by the results of the experiments, which show that the pathogenic germs after this period can no longer exist.—*Med. Press and Circular*, July 27, 1892.

**Earthworms as Carriers of Infective Germs.**—Tuberculosis may be diffused in many ways, as bacteriological research is constantly reminding us. Its bacilli may be stored and spread by subsoil

worms, according to a series of experimental studies lately completed by MM. Lortet and Despeignes. These worms, for several months and in various parts of their organism, can preserve the bacilli in question and reconvey them to the surface of the ground. Early in their researches MM. Lortet and Despeignes were confronted with the objection that in garden soils, in which worms abound, the bacilli of septicæmia, great in number and inactivity, are also met with—bacilli which, on experiment by inoculation, are capable of developing fatal disease, prior to the tuberculous process. This objection, however, they were able to dispose of by having recourse to a dry, silicious earth passed through a fine sieve, in which bacilli are not to found; while their next step was to place the tuberculous substance at the bottom of vases filled with this earth, on the surface of which they sprinkled a layer of white and very pure sand; and finally, they covered everything with a sheet of paper. After a few days the worms which were concealed in the earth at the bottom of these vases came up and deposited their intestinal evacuations on the sand—evacuations which MM. Lortet and Despeignes succeeded in collecting without risk of contamination, and in finally inoculating in a number of guinea-pigs. In consequence of these inoculations there was developed in the guinea-pigs a generally diffused, very distinctly marked tuberculosis. The experiment, far from a complex one, was successful in demonstrating that earthworms reconvey to the surface of the soil not only the products of their digestion, but also, together with these, the bacilli of tuberculosis in full possession of their infective virulence. A similar fact, it will be remembered, was established by M. Pasteur in his bacteriological studies on charbon. For this latter disease therefore, and in no less degree for that of tuberculosis, it is conclusively indicated that their infective *débris* should not be consigned to the subsoil without complete destruction of their germs. Unless this destroying process has been practised such *débris* may be seized upon by earthworms stored in their organisms and reconveyed to the surface, to become again the source of a new contagion.—Ed., *London Lancet*, Aug., 27, 1892.

**Coats (J.) on a Case of Addison's Disease in which the Tuberculative Nature of the Lesions in the Supra-**

**renal Bodies was Demonstrated.**—The patient was a man, slater, aged twenty-seven. His clinical history presented nothing remarkable. The autopsy showed slight evidence of tuberculosis of the lungs; at the apex of the left there were adhesions and consolidation, and at the right apex there was a slight amount of similar changes. The principal physical signs observed during life were, however, found to be due to a different lesion in the left upper lobe. There was here an area of pale pulmonary tissue, with dilated bronchial tubes—just as in atelectasis. The infiltration of the tissues around the dilated bronchial tubes was non-tubercular, and in some parts purulent.

There was no other lesion of importance in any organ except in the supra-renal capsules. One capsule presented a very pronounced caseation, and was large and "lumpy"; in the other the lesion was much less pronounced. The capsule was not greatly enlarged, but its normal tissue had disappeared, and its place been taken by a general homogeneous tough tissue in which one saw a few caseous centres.

Microscopic examination demonstrated that the lesion here was tubercular. It was possible, by the ordinary methods of staining, to demonstrate the existence of tubercular bacilli in the capsules. The bacilli were not numerous, but quite unequivocal.—*Glasgow Med. Jour.*, Aug., 1892.

**Thacher (J. S.) on the Blood in Diabetes.**—At a recent meeting of the N. Y. Pathological Society Thacher exhibited a specimen illustrating a peculiar condition of the blood occasionally associated with diabetes. One or two writers had spoken of this as not being very uncommon, but he had never met with it before, and in a series of thirty-seven cases reported at the London Hospital it was not found, and in forty-three cases at Guy's Hospital it was only noted twice. Some observers have thought it was produced by a sudden transformation, shortly before death, of the excess of sugar into fat, while others have believed it to be caused by acetone in the urine. Still others have claimed that it is not fat, and that the result follows mixing acetone with urine; but the weight of evidence is in favor of its being fat. A microscopical examination of the blood just presented showed it to be crowded with minute granules, smaller than the smallest micrococci, but on mixing the

blood with ether an emulsion was obtained' which presented under the microscope the appearance similar to that of milk. He had also extracted this substance from the blood with ether, and after the evaporation of the ether there was a greasy residue. It had been suggested that the attacks of coma with impeded respiration, such as we occasionally notice in connection with diabetes, are due to the formation of fat emboli in the lungs, but the evidence seems to point to a different etiology.

This specimen of blood was removed from a girl about fifteen years of age, in the service of Dr. Beverley Robinson at St. Luke's Hospital. About four or five months before her death she began to lose flesh and strength, and to suffer from great thirst. During the three months she was in the hospital the urine contained no albumen, and the daily average of sugar was from four to six per cent., or from two hundred to two hundred and seventy ounces. She gained in weight slightly immediately after admission, but afterwards lost flesh steadily. The day before her death she was up and around the ward; about ten hours before death she was found to be cold, and suffering from labored breathing, and three hours later, after a dose of morphine, she was found asleep, with a pulse of 130, and respirations 16 and very deep. About six hours before death she was seized with a tonic spasm, which lasted for about ten minutes, and was succeeded by coma which continued until her death. All the vessels in which any blood was found contained blood of white color, or of the pinkish hue shown in the specimen. In the heart there were some reddish coagula, and a quantity of blood looking like coagulated milk. The occurrence of dyspnoea is interesting in connection with this fatty condition of the blood.—*N. Y. Med. Record*, Aug. 27, 1892.

**The Teleology of Sunburn and Tan.**—The pathologic process is probably to be explained by a necrosis of cells, resulting from the action of the heat and light. Such a cell-death would be accompanied by the setting free of certain substances, some of which are positively chemotactic. Hence may result the ordinary phenomena of inflammation, and, following the subsidence of the inflammatory process, pigment-making cells manufacture quantities of dark pigment-granules, and store them up in connective-tissue cells

that lie between the columnar epithelial cells that rest upon the basement membrane separating the epidermis from the cutis vera. When the burning takes place more slowly such a deposition of pigment may result without the occurrence of acute inflammation.

From a teleologic standpoint some new light has been thrown upon this matter of pigment-formation by the ingenious speculations of Buchner ("Ueber die Schutzstoffe des Serums,"—*Berliner klin. Wochenschrift*, 1892, No. 19) in a recent article on the protective substances of the blood-serum. The fresh blood-serum of man and animals, besides possessing the power of quickly killing living bacteria (Grohman, Nuttall), and of destroying the red blood-corpuscles of an animal of a different species (Landois), is by some believed, under certain circumstances, to exert an antitoxic action upon the poisons produced by the micro-organisms of a given disease.

Buchner has shown that these properties of the serum—germ-killing, globulicidal and antitoxic—lie in certain obscure chemical bodies of extreme instability. Warming the serum for half an hour at a temperature of 55° C. destroys them, as does also the action of diffuse daylight, and more quickly still the rays of direct sunlight.

While, therefore, light is an important element in the growth and development of most animals and plants, yet light in the wrong place would probably have a deleterious influence, and it seems as if it were by no accident that certain organs have been buried in the interior of the body and covered with a protecting integument.

In the South the protective powers of the skin are increased by the presence of intense natural pigment-deposits, and we are tempted to regard the sunburn and tan of spring and summer as an approach to such a protective pigment-deposition, the pigment in these cases probably having its origin in disintegrated hæmoglobin.—Ed., *Med. News*, Aug. 27, 1892.

**Typhoid- and "Typho"-Malarial Fever.**—Comegys (C. G.) says: I am very fond of the antipyretics. I would give baths very freely if it were not for the inconvenience. A patient, however, should never be put directly into a cold bath; begin with warm water and cool down, taking care of the head by pouring cool water over it. I give the antipyretics pro

re nata, trying to keep the temperature down to 101°. The use of the antipyretics is sedative and diaphoretic, and increased tone will be given to the arterial circulation.

It is important that the toxic elements should be eliminated from the blood, hence the value of diaphoresis. It is not good practice to whip up the heart with stimulants, when often all that is necessary is to unload the blood of its toxic principles through the skin.

I am always looking out for hemorrhage in such cases. It is a very serious complication. I have seen the value of castor-oil purgations for the relief of intestinal hemorrhage. I tell the family that if any blood appears to begin the use of castor oil, a tablespoonful every hour, until it appears in the stools. For severe epistaxis nothing, in my experience, is equal to injections of water, as hot as can be borne, into and through the nostrils, until it ceases.

I give stimulants for their tonic effect. One to three teaspoonfuls every three hours, especially with phenacetin or acetanilid to prevent cyanosis.

If the tympanites be very great I have a cold pack put around the abdomen, which increases the tone of the intestinal muscles, and the gas is expelled.

If symptoms of meningitis show themselves I direct that cold water be poured from a height of two feet over the face and scalp, for ten or fifteen minutes at a time, and I give ten or fifteen grains of potassium iodide in lemonade, every four hours, until the condition is ameliorated.—*Med. Standard*, Aug., 1892.

**Leidy (J., Jr.) on Three Attacks of Typhoid Fever in the Same Patient, with Four Relapses after the Third Attack.**—The patient was an American, male, aged thirty-four years. In 1873 he had an attack of typhoid fever, lasting over fifteen weeks. About nine months later (during which interval he had never been quite well) a second attack came on, lasting seven weeks. His convalescence was then rapid, and the man then remained well until January, 1892. Then he fell sick with symptoms suggestive of typhoid fever, though there was some hesitation in giving a positive diagnosis as his previous history was well known (Dr. Leidy, Sr., attended the man in all three attacks).

The patient was put to bed and a typical typhoid case unfolded itself.

The temperature-chart showed no less

than four distinct relapses. During the third relapse there was a profuse intestinal hemorrhage, so that the case appeared almost desperate. The patient, however, slowly recovered.

A question of much interest is the cause of the relapses as they occurred during this attack. It has been suggested that the second attack of fever that this patient experienced, in the fall of 1873, was but a relapse of the first attack in the previous winter. The history of the patient's poor health, dating from the beginning of the first convalescence, in March, 1873, to the beginning of the second attack, in September, 1873, makes this theory tentative. That there was still some of the undeveloped poison lying latent in the system is highly probable.

During the third attack, dating from February of the present year, every possible precaution was taken to prevent a relapse. The patient was under the charge of a skilful trained nurse, the diet liquid, and the water used was boiled. After the first relapse the milk was changed, and afterward boiled. The intestinal symptoms were decided from the beginning. The only possible explanation appeared to be self-infection or auto-infection.—*Univ. Med. Mag.*, Aug., 1892.

**Newbold (G. P.) on Hemiplegia after Enteric Fever.**—A man, aged twenty-one, went through a severe attack of enteric fever, and on the thirty-fourth day was apparently convalescent. The next evening the temperature rose suddenly and he apparently suffered a relapse, passing at once into a typhoid state. This condition lasted over ten days, when it was discovered that there was a loss of power in the left arm and leg. The tongue was deviated and the right eyelid drooped. The paralysis gradually improved, and after several weeks the man was able to walk on crutches. Three months after the onset, results of examination were recorded as follows:

"Can whistle and close the eye and mouth almost perfectly. The grasp of the hand is not very good, but the arm has not wasted. Sensation is perfect. The peroneal muscles of the leg are wasted and painful, giving rise to a slight amount of talipes varus, which makes him walk in an awkward fashion, and he drags the leg."

It was thought that the cause of the hemiplegia in this case to be due either

to blocking of one of the cerebral arteries with a portion of a clot from the heart, due to the low condition into which the patient had passed, or by thrombosis *in situ*.—*London Lancet*, Aug. 27, 1892.

**Ransom (W. B.) on Pathology of Tabes Dorsalis.**—Before the recent meeting of the British Medical Association, Ransom gave a demonstration of the pathology of tabes dorsalis. Sections of spinal cord, spinal ganglia, and peripheral nerves from a case of tabes dorsalis were shown by the electric projection microscope. The following points were demonstrated :

1. Complete degeneration of posterior columns in the lumbar and dorsal regions with degeneration of postero-internal columns in the cervical region of the cord.

2. Extensive degeneration of fibres of the posterior roots in the lumbar and dorsal regions, and a lesser change in the cervical region.

3. Integrity of the peripheral nerves in the arms and legs.

4. Longitudinal sections of the spinal ganglia showed degeneration of fibres on the proximal side, with healthy fibres issuing from the distal side, and increase of connective tissue and some diminution in the number of ganglion cells in the ganglion.

5. A series of transverse sections of posterior root and ganglion showed degeneration of those bundles of fibres which entered the ganglion, while in the distal half of the ganglion healthy fibres began to appear, so that the efferent bundles were normal. They also showed a distinct fair-sized bundle of undegenerated fibres in the posterior root which runs past the ganglion without entering into it.

6. Serial sections of a healthy posterior root and ganglion showed the same bundle, which could be traced as distinct from the root to the efferent nerve riding on the top of the ganglion, without entering into relations with the cells.

Dr. Ransom, while reserving further consideration of the facts detailed, drew attention to the three following points : (a) the existence of a considerable number of fibres in the posterior roots which had no connection with the cells of the spinal ganglion ; (b) the possibility of the supposed double trophic function of the ganglion being associated with two physiologically separate halves ; (c) the fact that in a case where tactile sense was apparently unimpaired, only those fibres which did

not enter the ganglion were normal.—*Brit. Med. Jour.*, Aug. 27, 1892.

**Macintyre (J.) on the Bacteriology of the Larynx.**—Before the Glasgow Medico-Chirurgical Society Macintyre recently gave a demonstration of a large number of micro-organisms under the microscope, showed also some culture preparations, and with the magic lantern exhibited views of micro-organisms, partly micro-photographic and partly diagrammatic. The specimens shown had not all a direct bearing on diseases of the larynx, some being introduced for purposes of comparison. He directed special attention to several of the micro-organisms, the first being the streptococcus of erysipelas, which had been obtained from a case of erysipelas of the face followed by some months on an operation about the nostrils. He had seen a number of similar cases, and had been led to consider that the micro-organisms of erysipelas gain access to the antrum of Highmore, and are present in pus which has long lain there. Another important specimen showed tubercle bacilli from the inter-arytenoid membrane. In that membrane one could see the changes of tuberculous, and he would mention that those tubercular cases often ran a very chronic course, a patient he knew to have suffered from the disease for seventeen years still remaining in fair health, but still coughing up tubercular bacilli. On another slide, the bacillus of diphtheria was shown, and in connection with it Dr. Macintyre alluded to cases of masked diphtheria, in which the disease was not fully developed in the individual, though he might still act as a source of infection to others. In those masked cases there was a bacillus found, which he thought might be called the pseudo-diphtheria bacillus ; it was like Löffler's bacillus, but had not exactly the same appearance, and did not show the same culture relationships.—*Glasgow Med. Jour.*, Aug., 1892.

**Buchanan (R. M.) on Adenoma of the Liver.**—Before the Med. Chir. Society of Glasgow Buchanan showed, as a fresh specimen, a liver with this rare form of tumor. On making a transverse section of the organ a pulpy, greenish-yellow, necrosed mass was discovered within the right lobe. It was surrounded by a distinct capsule, and involved the lobe to such an extent that only a thin rind or margin of proper hepatic tissue remained. The left lobe and the remains of the right were

studded with small yellowish-brown, well-defined nodules, varying in diameter from less than a sixteenth to about a quarter of an inch. These nodules gave to the surface of the liver an appearance suggestive of cirrhosis.

The microscopic structure of the small tumors resembled somewhat normal hepatic tissue. They consisted of cells, closely resembling liver cells, arranged in tubular form. In some of these tubules bile was present, suggesting that the cells were secreting this product.

Dr. Coats wished to add that this was the first instance in which he had met with a tumor of this kind. The tissue closely resembled a glandular tissue, and one thought at first sight that this particular tumour must have originated in the hepatic ducts; but there was this fact that in some places there was bile between the cells, and it passed his comprehension to understand how the bile had got there unless secreted by the cells of the tumor, which would thus be of hepatic-cell origin.—*Glasgow Med. Four.*, Aug., 1892.

## MISCELLANY.

### Ross (G. T.) on Arterio-Sclerosis.

—The writer gives the history of a fatal case with results of autopsy, and then discusses the general causes of the condition together with the proper methods of treatment. Concerning the former he says:

Entire families sometimes show this tendency to early arterio-sclerosis, a tendency which cannot be explained in any other way than that in the make-up of the machine bad material was used for the tubing. More commonly this disease results from the bad use of good vessels, and among the causes of this condition are the following:

1. Chronic intoxications (not clear).
2. Over-eating (over-filling vessels, as fat people having no exercise).
3. Over-work of the muscles (raising blood pressure).
4. Renal disease (secondary or primary, not sure).
5. A cachectic state of the system, or some cause that alters the constitution of the blood and weakens the heart's action, such as prostrating illness and the mental conditions of anxiety and grief.

Treatment should first consist of an avoidance of all the causes of the disease. Venereal and alcoholic excesses, with overstrain, mental and physical, are especially dangerous. General hygiene, anti-syphilitic treatment where indicated, the gold salts, nitro-glycerine, are the only definite remedies we have. Special indications must be met by appropriate remedies here as elsewhere.—*Canada Med. Record*, June 18, 1892.

**McCroirie (D.) on Atheromatous Disease of Arteries.**—After a somewhat exhaustive discussion of the nature, etiology, and treatment of the condition, the following conclusions are drawn:

1. That the theory of mechanical irritation, while explaining many of the circumstances connected with atheromatous disease of the arteries, fails to explain many other circumstances connected therewith. The probability is that mechanical irritation is not the exciting cause, but the chief predisposing cause of atheroma.

2. That the presence of an irritant (or irritants) in the blood, acting upon the "fenestrated membrane of Henle" through the vasa vasorum, seems to be the most plausible explanation of the causation. Its invariable commencement in that part of the membrane of Henle which adjoins the media, and which most probably gets its pabulum from the capillaries of the vasa vasorum, would seem to point to the blood as the medium which supplies the irritant. Moreover, the marked hypertrophy of the middle coat of the vasa vasorum points to an impure state of the blood—the hypertrophy being caused by the continued efforts of the muscular fibres of the small arteries to resist the passage of the impure blood. Besides, this view would explain why it is that atheroma is sometimes found in one artery and sometimes in another—in each case it will attack that part of the vascular system which, from overstrain or other predisposing cause, has been rendered most liable to become diseased.

3. That the probability is that neither alcoholism nor syphilis ever do supply the irritant which causes this disease—their influence (if they exert any influence in the causation) being confined to rendering the tissues of the blood-vessels, as they undoubtedly render the tissues of other organs, less capable of resisting the onset of disease.

4. While it is possible that rheumatism,



gout, Bright's disease, and such like may supply the irritant in some cases, it is certain that atheroma sometime occurs in dependently of these diseases.

5. What the nature of the irritant (or irritants) is, it is impossible at present to say, and, while the Anti-Vivisection Act bars the way, it is extremely improbable that, in this country, it will ever be discovered.—*Glasgow Med. Four.*, Aug., 1892.

**Haines-Corey (E. R.) on Digitalis and Aortic Regurgitation.**—I should like to add my experience as to the use of digitalis as a remedy in the above condition, believing as I do that many of the unsatisfactory results in the treatment of aortic regurgitation by digitalis are due in a great measure to too large a dosage. In treating these cases now I rarely employ more than 2- or 3-min. doses of the tincture, in combination with 4 or 5 min. liquor. ferri perchlor. Since prescribing this quantity I have had excellent results, and in no case have I observed anything but benefit to the patient, though previously after larger doses epistaxis and faintness have occurred, so that at one time I had some misgivings as to the suitability of the drug in the treatment of this disease; but now, having ascertained the value of digitalis by small doses, I can confirm all that has been said in its favor. The fact is, digitalis is a much more powerful drug than is generally supposed, even 1 min. doses producing an effect on the pulse rate. I believe the evil consequences ascribed to the drug—that is, in prolonging the diastole and increasing the regurgitation—to be merely theoretical, or at any rate much exaggerated, because by a judicious use of the drug increased vigor is imparted not only to the cardiac muscle, but also to the muscular coat of the arteries; they are better supplied with blood, consequently tone and elasticity are increased, greater contractile power on the column of blood is induced, and further, an increased facility to its onward flow, a more regular heart's action, and an improved nutrition is the result.—*Brit. Med. Four.*, Aug. 6, 1892.

**Stearns (H. S.) on Musical Heart Murmurs and the Chordæ Tendineæ.**—At a recent meeting of the New York Pathological Society Stearns recalled the fact that, a little less than three years ago, Dr. E. Hodenpyl had presented to the Society several specimens showing the chordæ tendineæ stretched across the left

ventricle, and the question has been raised whether they gave rise to any abnormal sound. The specimen which he was about to present showed a similar condition. The specimen had been removed from a man who during life had had a musical systolic murmur at the base of the heart, and transmitted into the vessels of the neck, and also a diastolic murmur at the base, not transmitted into the vessels of the neck.

Dr. J. M. Byron said that the specimen was not only very interesting, but quite rare. He had seen two similar cases in which the condition had been diagnosed during life by the musical sound produced during the systole of the heart. In the specimen presented, the inferior chorda tendinea could not have produced the musical murmur, for the heart would have emptied itself before this band would have enough tension to give rise to a musical vibration. The sound may have been produced by the band across the upper part.

The president said that he had followed the case at the bedside very closely. The murmur was peculiarly loud and blowing, and was heard all over the præcordial space. It had been supposed to be due to the flapping of an eroded valve. At the time of his admission, the symptoms were those of advanced heart disease. He agreed with the preceding, that the sound was produced by the upper chorda tendinea.

Dr. J. S. Ely said that, by way of corroboration of what had been said, he would remind the Society that in Dr. Hodenpyl's specimens the chordæ tendineæ were stretched across the lower or apical portion of the heart, and that in his cases there was no musical murmur.—*N. Y. Med. Record*, Sept. 3, 1892.

**Walthard (M.) on the Factors Which Produce Septic Peritonitis.**—The conclusions I am able to draw from my experiments are as follows:

1. In an aseptic and "protected" (that is, by warmth and moisture) operation, with or without infection, no adhesions form between an injured surface if that is opposed to a normal one. Thus the abdominal cicatrix is not adherent to omentum or bowel, and the serous covering of the bladder or uterus may be freely destroyed by the cautery without any adhesion forming between it and the neighboring structures covered with normal membrane.

2. If two injured surfaces are free to move in the cavity, that is, by peristalsis,

etc., no adhesion forms. The reason of this is that each injured surface moves opposite an uninjured area. That this is actually the case I have shown by immobilizing the bowel by (a) giving opium after the operation, (b) fixing the parts by a ligature, and finding that under these circumstances adhesions invariably presented themselves. The empirical objections to opium after laparotomy thus find a basis in fact from the point of view of preventing adhesions.

As regards the freedom of movement, I should add that the force of peristalsis is sometimes sufficient to detach a silk suture uniting the sides of two coils of intestine.

#### SUMMARY.

a. During laparotomy the peritoneum must be kept wet and warm.

b. In cases in which adhesion of serous surfaces is to be avoided opium should not be given.—*Balt Med. Jour.*, Aug. 27. 1892.

**Pariser (H.) on Illumination of the Stomach.**—At a recent meeting of the Medical Society of Berlin, Pariser gave an illustration of the method of illumination of the stomach introduced by Heryng and Reichmann. Heryng's apparatus consisted of a Nélaton's stomach tube, to which is attached a small electric light. Heryng worked with a Stöhrer battery of twenty cells, and, in order to get the greatest amount of light, had the resistance of the lamp reduced as low as possible. Hr. Pariser made use of a Hirschmann's transportable accumulator, that gave very good results. The illumination took place in a darkened room, and gave the best results when the patient was in the erect posture. On sitting, the folds of the skin reduced the illuminated area too much. He could not succeed with the patient in the dorsal position, for the reason, he believed, that the stomach fell away from the anterior abdominal wall when filled with water. Good results could only be obtained when the stomach was full. When empty, only the part over the lamp was illuminated. After thorough cleansing by washing out, the stomach was to be filled with  $\frac{1}{2}$  to 2 litres of clear water. On turning on the light, a bright red illuminated area was seen over the abdominal wall, the contour of which corresponded to the lower and lateral border of the stomach. If the lamp was drawn slowly out of the stomach, a red illuminated spot crossed by dark lines appeared, corresponding to

Traube's crescentic space. The dark lines were the ribs, the bright ones the intercostal spaces.

Two points were particularly well lighted up, first the spot in contact with the lamp, and second the umbilical space, for here there was neither muscle nor fat.

In order to be of much use for diagnostic purposes, illuminations would have to be practised systematically, and the experiments of Heryng and Reichmann on the dead body were a direct encouragement thereto.—*London Med. Press*, Aug. 24, 1892.

**MacMunn (J.) on the Functions of the Prostate.**—With the idea of trying to determine the functions of the prostate, I have for some years past dissected this gland in all the animals whose bodies I could procure, the points I bore in mind chiefly being: (1) The degree of development in those animals which possess the greatest and least sexual activity respectively; (2) the weight of the organ in comparison to the weight of the testicle; (3) the comparative amount of granular and muscular elements, and the connection of the latter with the muscular coats of the bladder. As to No. 1, I cannot say that the most actively sexual animals always, or even as a rule, possess the largest prostates. As to No. 2, the only animal whose prostate I found equal to the weight of the testis was the common seal; here each in the young adult weighed 2½ oz. As to No. 3, with the exception of the seal, whose prostate is well formed and muscular, I found the granular to preponderate greatly, as a rule, over the muscular elements in all the animals I examined. In the boar this is especially well marked, the boar's prostate being entirely racemose, very succulent, and with little or no muscular elements.

As to the connection of the muscular tissue with that of the bladder, in no animal examined have I found such a direct attachment as in the case of the well-known anatomy of the human prostate, for connected directly with it at both ends is the detrusor muscle at least.

Now although investigations such as these tend to point to the almost entirely sexual character of the gland in the lower animals, and although the observations of Hunter on the effects of castration strengthen the supposition, the intimate muscular relations of the human prostate with the bladder point to a partial sub-

ordinate urinary function as well. Moreover, Leuckhart, supported by Virchow, points out that well-formed females possess a prostate (not the uterus) close to the meatus urinarius.

Bearing in mind the muscular connections of the prostate, ought we not to be prepared to find retention in senile change dependent sometimes on causes other than

obstruction? Is not the prostate in one sense a buttress for the bladder, and a focus for attachment of its fibres?

Whatever degenerates this buttress in age, or even relaxes it in earlier life, will either degenerate or relax the detrusor or change its focus of attachment, and hence partial, or it may be complete, failure of expulsive power.—*Brit. Med. Jour.*, Aug. 6, 1892.

## BOOK NOTICES.

**Aseptik.** By Dr. C. SCHIMMELBUSCH, Assistant Surgeon to the Königl. Universitätsklinik of Professor Ernst von Bergmann in Berlin. Berlin, 1892.

Under this title the author has published a series of papers on Asepsis which are of very great value. The practical working of his methods are exemplified by the results obtained in Professor von Bergmann's clinic. The theoretical grounds for these methods are given in extensive and well selected references to those observations which have shown the various sources of wound infection and the best ways of dealing with them.

*The Causes of Wound Infection* are, of course, micro-organisms. The exact kinds of micro-organisms which cause the infection are for the most part now known, and fortunately they are not those which are the most resistant to germicides. Globig has demonstrated a bacillus which has spores that are not killed by four hours' boiling in water. It is obviously unnecessary to use methods which would destroy such spores since they are not the causes of wound infection.

The anthrax spore is supposed to be the most resistant micro-organism which causes wound infection.

*Disinfecting agents* are treated of at considerable length. Boiling water is considered one of the most powerful of all. It kills anthrax spores in two minutes, and the ordinary bacilli and cocci in one to five seconds.

Water at 60°-70° C. kills in one to two hours those bacteria which do not produce spores.

Steam kills anthrax spores in ten to fifteen minutes. Compressed steam is slightly more powerful than steam at atmospheric pressure.

Dry, hot air is far less powerful. At 100° C. it kills spore free bacteria in one and a half hours. At 140° C. it kills bacilli spores in three hours.

Corrosive sublimate is now believed to have less power than was formerly supposed. Cultures have been obtained from anthrax spores which were immersed in a 1-1000 sublimate solution for an hour, and in one case growth occurred after twenty-four hours' immersion. The spores in this case were partly protected by a knot in the thread.

This shows the uselessness of the far too prevalent custom of immersing objects for a few seconds in a sublimate solution in the expectation of thus sterilizing them. In previous experiments it is believed that the sublimate which adhered to the threads and bacteria prevented growth.

Five per cent. solution of carbolic acid is still less powerful. Anthrax spores have repeatedly grown after being immersed in it for more than twenty-four hours.

The practical application of these facts are numerous. Instruments are sterilized by boiling in a one

per cent. watery solution of carbonate of soda for five minutes. Large instruments should be boiled a little longer. The soda increases the sterilizing power of the boiling water, it removes oily or fatty material and prevents rust.

Dressings are sterilized by steam in three quarters of an hour. During the steaming they should be held in a receptacle made of tin or other material, and should not be removed from this until used.

Hypodermic needles are sterilized by drawing in and expelling boiling water five times. After drawing in and expelling three per cent. solution of carbolic acid ten times, he obtained 5,000 colonies of bacteria from a syringe which had previously been infected.

Sponges, after a thorough cleansing, may be sterilized by placing them in a large pot of one per cent. carbonate of soda solution. This is boiled and then removed from the stove while boiling. The sponges are then put in the heated solution in a bag and left there half an hour.

Metal sutures are boiled like the instruments—silk ones may be treated either like the instruments or the dressings.

Infected towels, sheets, etc., are sterilized by a half hour's immersion in a one per cent. soda solution which is taken from the stove boiling before they are put in.

For the dressing of nearly all wounds a dry dressing of plain sterilized gauze is the one to be used. The dryness of the dressing is a quality of great importance since it prevents bacterial growth.

"There is no agent which hinders decomposition of the wound secretion in a bandage more simply, harmlessly, and promptly than does dryness, the evaporation of the products of secretion.

"Moisture is the peculiar life principle of the lower organisms, dryness their greatest foe."

This has been shown both experimentally in the laboratory and practically in the treatment of wounds.

"The use of antiseptics in the bandage is always a 'remedium anceps.' A weak concentration of the germicide does not prevent bacterial growth, a strong one often acts as a two-edged sword with a baneful effect not only on the bacteria but also on the wound and body of the patient."

Where there is a tenacious thick wound secretion which will not be well absorbed by gauze, or where a packing of the wound is necessary, iodoform gauze may be used.

This should not be prepared from a solution of iodoform in ether, for the iodoform is then easily decomposed. Nor should an emulsion in glycerine be used since the glycerine diminishes the absorbing power of the gauze.

It is best prepared by sprinkling iodoform onto

sterilized gauze a short time before it is used. The gauze may be moistened with sterilized water, and the iodoform rubbed in with a piece of sterilized gauze and then put into a sterilized gauze box.

Iodoform gauze should not be steamed as the steam decomposes the iodoform.

This short *résumé* only gives a small portion of the material which is found in this excellent work. The methods are simple, practicable, and rational. The author treats of almost all the problems in asepsis which the surgeon has to deal with.

Fowler's method of sterilizing catgut in boiling alcohol seems to the writer a better method than the more complex ones which Schimmelbusch gives.

The method of sterilizing instruments by boiling them in a one per cent. soda solution is certainly a most desirable one. It has now been used by many surgeons for a year or more. The five minutes' boiling which he recommends for ordinary-sized instruments will seem too short a time to many.

Davidsohn, who worked up the method, found that it was enough to kill anthrax spores on a thread which was put in a hole in a piece of metal. It also sterilized instruments which were infected with pus and pyogenic bacteria.

Redard (*Revue de Chirurgie*, 1888, p. 360), however, has recorded observations which differ considerably from Davidsohn's. He prepared solutions which had a high boiling-point and tested their action on instruments which were smeared with pus and cultures of pyogenic bacteria. He found that forty-five minutes' boiling at a temperature of 110°-120° C. was necessary for the sterilization of such instruments as toothed forceps, sounds, and trocars.

The great difference in these results makes it desirable that more experiments should be made.

Davidsohn's results agree with those obtained by other observers much more closely than Redard's do. But we must still remember that the crevices in complex instruments are much harder to sterilize than smooth surfaces are. C. N. D.

#### **Book on the Physician Himself, and Things That Concern His Reputation and Success.**

By D. W. CATHELL, M.D. New Tenth Edition (Author's Last Revision). Thoroughly revised, enlarged, and rewritten. In one handsome royal octavo volume. 348 pages. Price, post-paid, \$2.00, net. Philadelphia: The F. A. Davis Co., 1892.

Ten editions of any work attest its popular favor, whatever may be said regarding its intrinsic value. We have carefully read a previous edition of Dr. Cathell's book, and, we believe, with profit. Along with much that is valuable it contains some things that are trivial and even puerile, but these are only an insignificant part. The volume is one which should be read by every man commencing the practice of medicine. He will find in it much about which he desires information which he cannot obtain from any other source. We regret that the volume contains a somewhat lengthy diatribe against Homœopathy, not that we believe in the latter system, but because we believe that it thrives rather than is discouraged by this kind of pleading.

#### **A New Pronouncing Dictionary of Medicine.**

By JOHN M. KEATING, M.D., and HENRY HAMILTON. A voluminous and exhaustive hand-book of 878 pages, containing medical, surgical, and scientific terminology, concise explanations of the various terms used in Medicine and the allied sciences, with Phonetic Pronunciation, Accentua-

tion, Etymology, etc. Philadelphia: W. B. Saunders, 1892.

The scope of this work is one to be commended, and we had hoped to find in it an authority which should at once stamp it as the *Century Dictionary* of medical literature. Unfortunately, this hope has not, on close examination, been realized. The book contains many glaring mistakes. Some are due probably to careless proof-reading, but there is no excuse for this in a dictionary. The same word is accented differently on different pages. In some instances no accent is given at all. Any one who depends on this book for an authority will depend on a broken reed.

**Essentials of Medical Diagnosis.** By S. SOLIS COHEN, M.D., and — ESHNER, M.D. Pp. 382. Philadelphia: W. B. Saunders, 1892.

This manual is No. 17 of Saunders' Question Compend for Students of Medicine. We have already had occasion to commend the series, and the present volume is fully up to the standard of its predecessors. As its title indicates, it deals solely with diagnosis and the requisites therefor. Nothing is said about treatment. As a guide for reading a more extensive treatise it can be used with profit.

**Bulletins et Mémoires de la Société Française d'Otologie, de Laryngologie et d'Rhinologie.** Tome viii., Fascicule 1. Paris: J. Rueff et Cie., 1892, pp. 161.

The title fully expresses the contents. The papers have all appeared in current French special journals. **The Liverpool Medico-Chirurgical Journal, Including the Proceedings of the Liverpool Medical Institute.** No. 23. July, 1892. London: H. K. Lewis.

An excellent volume of society reports presented in an attractive fashion. Of especial value are papers on "Nerve Suture and Nerve Grafting," by Damer Harrison; "Gastro-Enterostomy," by F. T. Paul; "Abscess of the Antrum of Highmore," by J. Middlemass Hunt; and "Dementia," by James Shaw. The typographical appearance of the volume is praiseworthy.

**Cardiac Outlines for Clinical Clerks and Practitioners, and First Principles in the Physical Examination of the Heart for the Beginner.** By WILLIAM EWART, M.D., Cantab, F.R.C.P., Physician to St. George's Hospital, etc. 12mo, pp. 159. With 62 illustrations. New York: G. P. Putnam's Sons, 1892.

The recent work by Dr. Ewart on *How to Feel the Pulse and What to Feel in It* prepares us for the satisfaction with which we have examined this manual. It is an illustration of the value of anatomical precision in the study of cardiac maladies, and an effective plea for the record of such studies by the graphic method. While every student must have the judicious aid of a living teacher, yet this system of examination as laid down by Dr. Ewart will largely help him to think for himself and educate his fingers, eyes, and ears up to the point of erudition. We find, on examining the pages, a systematic presentation of facts and an enumeration of many of the valuable "finer points" of physical diagnosis. It was our privilege to look over the work while yet in manuscript, and the favorable opinion we then formed is more than confirmed by a further examination of the printed volume. We regard it as incomparably the best work yet issued to aid students in mastering the difficulties of physical diagnosis of heart disease.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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WHOLE No. 174.

## LEADING ARTICLE.

**Sweet Oil in the Treatment of Gall-Stones.**—It is characteristic of the spirit of investigation of the present age that it not only looks forward to new fields, but also turns backward and digs deeper in some of the fields supposed to be already well gleaned. Illustrative of this is the question of the efficacy of sweet oil in the treatment of gall-stones. For many years, in fact until recently, it was generally admitted that this remedy was of unquestioned value in the condition named. But a more intimate acquaintance with intestinal chemistry has led to the theory that the masses expelled after the use of the oil are not gall-stones at all, but merely small bodies formed by the union of the oil with the alkaline juices of the bowel, practically lumps of soap.

To help set the question at rest, the Therapeutic Section of the Philadelphia Polyclinic Medical Society undertook a collective investigation with regard to this point. Dr. Thomas J. Mays, in the Cincinnati *Lancet-Clinic* (Sept. 26, 1891), reports the results of these investigations. Circulars were sent out to the profession containing the following questions:

"Sex and age of patient? Seat of pain? Jaundice? Previous attacks? Did you test any other remedy, and with what results? Result of treatment with olive-oil. Remarks."

Nineteen replies were received detailing thirty-seven cases. To these the Society's committee were able to add seventeen others, making a total of fifty-four cases recorded with sufficient accuracy to furnish trustworthy data. The report continues:

"An analysis of these fifty-four cases shows that there were about one third more females than males who suffered from gall-

stone colic; that two died, that in three negative results were obtained, and that in fifty, or in 98 per cent., positive relief was afforded. These results make a better showing still, when we consider that one of those who died was suffering from adhesive obstruction of the bile-ducts—a disease which no procedure, either medical or surgical, could have remedied. Nor do these figures give us a true estimate of the favorable action of olive-oil in this disease; for two of the observers state that they have treated forty other cases of biliary colic without a failure, but of which they had kept no record—making in all a collective return of eighty-nine cases—showing the great value of this drug."

The matter of the mode of action of the remedy is a point wherein authorities differ. Rosenberg's view is that sweet oil is a true cholagogue, increasing the quantity of bile, while at the same time it makes it more watery. It may stimulate the biliary channels by coming in contact with their openings into the bowel. The splitting up, by the pancreatic steapsin, of the oil into its fatty acid and glycerine may allow the latter to exert (as it does when given by the rectum) a powerful peristalsis (Stewart's Theory; see also *Phil. Med. News*, Nov. 23, 1889).

On the other hand, Virchow asserts that the oil is absorbed from the bowel, and is excreted by the liver out into the bowel again. After a consideration of these three theories the committee give their adhesion to the latter. That is to say, sweet oil does not dissolve biliary concretions so much as it increases the flow of bile, and flushes out with a lubricating action the biliary channels.

Regarding the dose of the oil, moderate amounts seem to act as well as larger ones.

Patients receiving dessertspoonful doses every three or four hours seemed to be relieved as quickly and as positively as those to whom five ounces to two pints were administered. The aversion of so many persons to oil renders this observation of practical value. Another point brought out by the investigation is that cotton-seed oil seems to act as well as the olive-oil. Much of the oil sold under the name of "olive" at the present day and used extensively for the table is in reality nothing but the highly refined product of the cotton plant. Probably any unirritating oil will fulfil the therapeutic indication.

To the committee's report is appended a table giving in full the answers to the questions contained in the circular. From it we learn that, of the 54 cases, 30 were women and 24 men. The ages ranged from ten (and this boy had one similar attack five years before) to sixty-eight. All but 6 had had previous attacks—from a single one to an indefinite number. Jaundice was absent in 2; question not answered in 6; otherwise it is distinctly stated that it was present in every case. In considerably the larger number of cases the pain was confined to the right hypochondrium. Among the remedies employed by the various observers were antipyrin, chelidonium, dioscorea, sodic phosphate, chloride of ammonia, morphine, ether (anæsthesia) atropine, calomel, sodium, bicarbonate, silver nitrate, chloroform (inhalation), sodium bromide, quinine, ipecac, chlorate of potash, succinic acid, and potassium iodide. All these remedies naturally divide themselves into three classes—chologogues, anti-spasmodics, and anodynes. In each case oil was afterward administered, the remedies previously given having failed to afford relief. The results are difficult to tabulate on account of the great diversity of answers given, but in nearly every case they are surprisingly gratifying.

These optimistic expressions, when presented by the committee to the session of the Society, were not agreed to by quite a number who participated in the discussion. Dr. J. C. DaCosta had used the oil, but his cases had not been as quickly relieved as were the majority of those reported. Dr. Price thought that a mistaken diagnosis might have been made in some cases. Where the stones were soft the oil might be of service, but in many cases of this class the patient never suffered from bilious colic,

and the presence of the stones was made known only at the autopsy. He could not see how the oil treatment could be of service where the stones were hard, as in cancer of the liver, a condition which he thought was frequently set up by the irritation caused by the concretions. He believed that the purgative effect of the oil alone was the only way in which it could render service. When we consider the limited duration of the pain, even where nothing is done, it is difficult to determine the exact value of any plan of treatment.

Dr. J. B. Walker thought that the salient feature in the report was the fact that the oil seemed to prevent a recurrence. He had used olive-oil, but the results were not satisfactory. In obstinate cases he had given spirits of chloroform in teaspoonful doses three times a day.

In closing the discussion Dr. Mays called attention to the fact that Rosenberg's experiments proving the chologogic action of olive-oil had been before the profession for over a year and a half. His conclusions had never been disproved. Even Rutherford's classical dicta on the relative effects of various hepatic stimulants had had to be modified in the light of further investigations. He was of the opinion that, from the most trustworthy clinical evidence at our command, a stronger case could be made out for the oil than for any other of the remedies proposed. Concerning chloroform, he said:

"If we believe in the efficacy of chologogues to relieve the attacks of biliary colic, and are in search of an agent having a similar action to prevent their recurrence, then I think it is useless to advocate the action of chloroform in this disease, as has been done to-night. So far as I know, chloroform is not a chologogue, but may act by relieving the spasm of the gall-ducts, and by having a solvent action on the calculi. I can more readily see how olive-oil would prevent such recurrence, since it is one of the best stimulants to the hepatic secretion that we possess."

There will always be diversity of opinion in such matters, because very few general practitioners see enough cases of one kind treated with different remedies, to draw adequate comparisons between the latter. Collective investigation, however, is undoubtedly the best and safest method of arriving at reliable data.

RECENT FRENCH CONTRIBUTIONS TO MEDICINE.

**Combemale on a Case of Chronic Antipyrinism.**—The patient was a single woman of thirty-eight, who complained of frequent and copious emesis of an acid, watery fluid, occurring generally after eating. She complained also of almost continuous eructations of a gas which left a sour taste in the mouth and a persistent burning sensation along the œsophagus. She had a short, dry cough. The patient's nutrition, of course, suffered, as she ate little because of the aggravation food produced. Insomnia was present at times, and sleep was broken by restlessness and dreams. The bowels were regular. The menstrual flow was irregular, lessened, and pale. There was an anæmic cardiac murmur. The entire abdomen was tender, particularly in the epigastric region.

Her trouble was thought to be gastric ulcer, although cancer was considered possible. Four years before, the patient had suffered from an attack of acute polyarticular rheumatism, in which salicylate of soda failed, and antipyrin was substituted with a good result as far as sedation went.

The patient acquired the antipyrin habit, however, and as a stimulant took daily from fifteen to thirty grains, and on frequent occasions double or treble that amount.

With the aid of a potion containing cocaine and antipyrin, gastric tolerance was established to such an extent that vomiting ceased, and two quarts of milk could be taken and retained. The general condition improved, of course, and in eight days sleep was nearly normal, and the patient promised to abandon the habit. —*Bull. Méd. du Nord*, June 26, 1891.

**Laborde (J. U.) on the Action of Salts of Strontium on the Organism, and the Innocuity of its Action.**—Differing from barium, the author considers strontium harmless, and says in proper doses it has a favorable effect upon nutrition. Animals taking it have a better appetite and gain weight. It exerts a conservative and anti-putrid action on the tissues, liquids, and excreta. In its elimination by the bowels it kills tapeworms in dogs, thus proving that it has parasiticide power. The lactate of strontium acts as a diuretic, the urine passed being clear and limpid. —*La Tribune Méd.*, July 30, 1891.

**Ulyptol.**—Ulyptol is composed of salicylic acid, phenic acid, and essence of eucalyptus. It has an aromatic odor, a burning taste, and is almost insoluble in water, while it is soluble in alcohol, chloroform, ether, glycerine, alkaline solutions, and ammonia.

Schmeltz, who named it, says it is an excellent antiseptic for the treatment of wounds. —*Gaz. Méd. de Liège*, Aug. 27, 1891.

**Faidherbe (A.) on Cancerous Ulcerations of the Nose Healed by Applications of the Chlorate of Potash.**—The patient was a woman of seventy, who had been well up to her sixty-second year, at which time a reddish tubercle, which later broke down and caused a spreading ulcer, appeared on the dorsum of the nose. When first seen, there existed an ulcer two centimeters by five, which was the seat of lancinating pain, and bled at the slightest touch.

Compresses wet with a saturated solution of the chlorate of potassium were ordered, and fourteen days later, cicatrization having commenced, applications of the chlorate in powder were added.

The sore speedily healed and remained so almost a year, when it broke out again slightly, yielding again promptly to the same treatment. —*Four. des Sci. Méd. de Lille*, Aug. 28, 1891.

**Julliard on the Incompatibility of Iodide of Sodium and Sulphate of Spartein.**—In mixing solutions of the above agents, the author has marked the formation of a yellow precipitate. This occurred with different specimens of the iodide of sodium and even with chemically pure samples. There seems to be some incompatibility between the two drugs, and they should not be combined in the same mixture. —*Four. de Méd. de Chir. et de Phar.*, July 20, 1891.

**Abadée (Ch.) on a New Treatment of Granular Conjunctivitis.**—The author claims that, in the most remote recesses of the conjunctival sac, inaccessible to the ordinary simple operation of eversion, the real infectious focus of granular conjunctivitis resides. Ordinary treatment does not touch this.

He accomplishes complete eversion by a specially constructed instrument, perform-

ing the operation under a general anæsthetic, as it is extremely painful.

The palpebral conjunctiva thus entirely exposed, he thoroughly scarifies. Then with a tooth brush he energetically rubs both ways the bleeding surface with a 1:500 sublimate solution. Afterwards he daily douches the everted mucous membrane with a 1:500 sublimate solution.—*La France Méd.*, Aug. 7, 1891.

**Dubuc on Cystitis Consecutive to Facial Erysipelas Probably of Microbian Origin.**—A man of seventy-three was taken with facial erysipelas, about September 28, 1890. October 24th, the patient having been some days convalescent from the erysipelas, he noticed very frequent and painful micturition. The cystitis became purulent, and, under irrigations of tepid boric solutions, had hardly disappeared in a month.

The author thinks that the mechanism of the cystitis or nephritis in such cases is explained by the presence of infectious material in the blood and its elimination by the kidneys.—*L'Union Méd.*, July, 1891.

**Bourgeois on Subconjunctival Dislocation of the Lens.**—A man of sixty-seven received a blow from a cow's horn. The lens was dislocated not by a penetration of the horn into the eye but by a rupture of the sclerotic by a blow on the opposite side of the globe. Blindness immediately followed the accident and the eye could not be preserved because, besides the dislocation of the lens, there was a total detachment of the iris which became incarcerated under the conjunctiva. The sclerotic was found to be  $\frac{1}{8}$  instead of  $\frac{1}{4}$  mm. thick. The eye was removed for fear of sympathetic ophthalmia.—*Union Méd. du Nord-Est*, Aug., 1891.

## REPORT ON ORTHOPEDIC SURGERY.

BY JOHN RIDLON, M.D.

**Bird (G.) Prognosis of Lateral Curvature.**—It is important to be able to answer the questions, "How far is scoliosis curable?" and, "How far is any given case curable?" as our treatment must depend largely on the answers we could give. There were some exceptional cases that defied prognosis, but in most cases an answer could be given. In the rachitic cases, where the disease was due primarily to bone troubles, cure was not to be expected when rotation was obvious. In non-rachitic cases the prognosis would depend on whether or no secondary bone deformity had supervened on the primary ligamentous lesions. These non-rachitic cases were curable in their early stage, and the result of suspension would guide us in making a prognosis. In bad incurable cases subjective symptoms alone could be relieved or mitigated.—*Med. Record*, Aug. 22, 1891.

**Ketch (S.) Posterior Rachitic Curvature of the Spine.**—Of the deformities of the spine whose underlying cause is found in the condition known as rachitis, the ones most commonly seen in practice are the lateral and posterior. The etiology and pathology of posterior rachitic curvature of the spine are essentially those of rickets in general, the deformity being simply one of the local manifestations of a general

diathesis. Dr. Ketch believes the causation is largely mechanical, and furthered by such movements as tend to throw the weight of the body on the weakened vertebræ and its appendages. Rachitis of the vertebræ evinces itself, as does rachitis, usually at a very early period of life, by an irregularity in the process of ossification, by cartilaginous enlargements, and by marked diminution of the harder substances entering into the bony formation, notably the lime salts. In consequence of this unstable condition of the rachitic vertebræ, we find in the long axis of the spinal column many soft places, in some cases including the upper and lower surfaces of all the vertebræ, in others localized to a few.

A large number of cases show a limitation of the curve of the dorso-lumbar spine, a very favorite position for the occurrence of Pott's disease. In addition to the deformity we may have more or less pain, spinal rigidity, pseudo-paralysis, or any of the distinctive symptoms relating to the area of disease. He then called special attention to the differential diagnosis between this deformity and spinal caries.

In the treatment of young children from one to two years of age, he never advises the use of mechanical supports, the tissues being so unstable that any pressure is apt



to be badly tolerated. In this class the constant recumbent position, with fresh air and sun-baths, together with internal treatment and close attention to the diet, are usually sufficient. In older cases, after the acute stage has passed, he advises antero-posterior support.—*Med. Record*, Jan. 3, 1891.

**Davis (G. G.) Silicate of Soda and Aluminium as a Surgical Dressing.**—

It is claimed that the difficulties and failures in the use of "water-glass" are usually due to not squeezing out the bandages and to smearing the solution over the outside of the dressing. Thin strips of aluminium are used to strengthen the dressing.—*Univ. Med. Mag.*, Sept., 1891.

**Robinson (A. W. M.) on a Simple Form of Spinal Support.**—The brace is very like that which is known in this country as the "Knight brace," with these exceptions: It extends higher at back and front, and the posterior parallel uprights are nearer together, bringing pressure upon the transverse processes instead of the ribs.—*Provincial Med. Four.*, Aug. 1, 1891.

**Abbe (R.) on the Present Limitations of Spinal Surgery.**—The literature is reviewed, and the questions raised are discussed at length with the conclusions to be drawn therefrom. The following operation is advised:

A bold incision a half inch to one side of the spines is to be made, clean and quickly, through the soft parts to the laminæ, parallel with a block of at least five spines. A heavy bent bone-cutting forceps is used to sever the spines at their bases. The interspinous ligament is not cut. A periosteal elevator is now used to scrape the laminæ clean of the adjacent muscles, and the entire block of severed spines is drawn to the opposite side by the aid of broad retractors and periosteum elevators. Thus, without sacrificing any tissue, the entire breadth of the laminæ is thoroughly exposed in a clean wound. To remove the laminæ, bone-cutting rongeurs, a straight and a curved pair, are the only instruments necessary. Their cutting edges should meet at a slight angle, like a flat Gothic arch. In a very few moments an ample display of the spinal cord can be effected, and after the operative work upon it is over the block of spines, with their muscular attachments intact on one side, falls back into place and is sutured. Thus there is no weakness of the spinal column remain-

ing from destruction of the interspinous ligament, and no gap to be filled through removal of the spines.—*Selected.*

**Finley, Ross, and Spier on Secondary Cancer of the Liver and Vertebræ.**—A case is reported with autopsy.

The chief interest in the case centres in the paraplegia being of a painless nature, as such cases are usually accompanied by severe pain shooting along the course of the nerves. The duration of the case, as far as can be ascertained from its onset, was about two years and two months.—*Montreal Med. Four.*, Aug., 1891.

**Moulin (M.) on Suppuration Occurring in Joints Affected with Osteo-Arthritis.**—Joints affected with osteo-

arthritis are said never to suppurate. These three cases are of interest, as showing—(1) That under certain conditions (of which the presence of synovial diverticula is one) suppuration may occur; and (2) that, speaking generally, the tissues of joints affected by this disease are capable of resisting the action of pyogenic micro-organisms in a very unusual degree. In the first two cases there does not appear to have been any accessory agent. The micro-organisms gained access to the tissues in some way (probably through the blood), and by slow degrees broke down their power of resistance. In the third case events may have followed the same course, but from the post-mortem appearances it is more likely that tubercle bacilli gained a foot-hold first, and that it was not until they had worked their usual effect that the pyogenic germs were able to induce suppuration. In all three the destructive process commenced in the soft parts, either in hernial protrusions of the synovial cavity, in bursæ communicating with it, or in the soft peri-articular connective tissue, and only involved the general cavity secondarily; and in all alike the bones, the capsules, and the ligaments were but slightly affected, as if, in spite of the impairment of nutrition that invariably accompanies inflammation, whether rheumatic or not, the condensation characteristic of this special disorder had given them power to resist. Possibly the same feature may account for the absence of any sign of hectic in the first two cases. Although there were open sinuses leading by devious routes into the interior of the joints, there was no fever, and presumably therefore no absorption of the products of septic de-

composition. In the third case in which this complication was present this occurrence is accounted for by the extreme complexity of the abscess sac and the antecedent changes effected in the tissues around by the action of the tubercle bacilli. If it were needed, cases of this kind would afford an additional argument in favor of the practice of excising synovial diverticula and hernial protrusions in connection with joints at an early stage of their development, and closing the aperture of communication by suture or ligature. I have performed this operation in connection with the knee-joint on several occasions with the happiest results. If left to themselves sacs of this kind are bound by the ordinary laws of hydrostatic pressure to enlarge more and more rapidly; their walls become thinner; at length they approach the surface, perhaps far away from their original starting-point; and then they either break of themselves or become inflamed owing to the friction or the tension they cause, and fall an easy prey to pyogenic germs. Occasionally, it is true, as in the second case quoted above, no ill result ensues, but such good fortune cannot be relied upon, or even expected.—*The Lancet*, July 18, 1891.

**McKenzie (B. E.) on Tuberculosis in the Ends of the Long Bones.**—This paper, which was read at the Post-Graduate Course of the University of Toronto, consists of a review of several recent papers on the pathology, symptoms, and treatment of tubercular joint disease. No new facts were adduced, and the subject of treatment is summed up in the closing lines: Give the patient good food, good air, and sunlight, and give the diseased member rest.—*Selected*.

**Poole (T. D.) on Urethral Synovitis.**—A case is reported of synovitis at hip and elbow, in an otherwise healthy boy of sixteen years, in whom there was no urethral discharge, and no history of there having been one, but in whom a stricture was present. The joint inflammation appeared to be due to the passage of a catheter. The cause of the trouble was that of the ordinary gonorrhœal rheumatism.—*Edin. Med. Four.*, Aug., 1891.

**Murray on Bone-Grafting.**—Girl, aged six years, left hip-joint excised for old-standing tubercular disease. The joint was full of pus, and the head of the femur denuded of cartilage, resting on the outer

lip of the acetabulum, which was also rough and carious. The femur was sawn through obliquely at the upper part of the trochanter, several small sequestra removed from its cut surface, and the adjacent bone gouged away, a cavity thus being made in the upper end of the bone, which would easily admit the end of one's thumb. The acetabulum and soft parts were then well scraped, and when all pulpy material was thought to be removed, the wound was well washed out, dried, and the cavity in the femur and the deeper parts of the wound filled with decalcified bone. The soft parts were then brought together, a posterior opening being made for drainage. Primary union resulted.—*Liverpool Med. Chir. Four.*, July 1, 1891.

**Walsh (D.) on Osteomalacia Occurring in Insane Patients.**—Four cases are reported; all were in women between the ages of fifty-nine and seventy-eight years; three had born several children, and all had an aortic heart lesion. Fractures occurred in three of the cases.—*The Lancet*, July 25, 1891.

**Brothers (A.) on Specimens of Ribs with Exostoses and Absorption of Bone from a Drainage-Tube in a Case of Empyema.**—One of the tubes was removed within a week, but the other was kept in place for eight weeks. An acute nephritis with general anasarca existed for six months, and then completely disappeared. The boy rapidly gained in flesh and strength, but a fistulous tract remained.

The specimens are two sections of ribs each about two inches in length joined by a central bridge of new bone broken through at the time of the operation. The upper rib shows on its lower border a circular aperture, a quarter of an inch in diameter, due to absorption from the drainage-tube. The lower arch of the circle is completed by the new osseous structure, which binds the upper and lower ribs firmly together. This bridge of newly formed bone is fully half an inch square, and extends farther backward in a pointed manner than the ribs themselves.—*N. Y. Med. Four.*, July 25, 1891.

**Townsend (W. R.) on Sprains of the Ankle.**—The treatment is as follows: The limb is elevated, to assist in reducing the swelling, then strips of adhesive plaster, each  $1\frac{1}{2}$  inch in width, and of the length adapted to the foot and ankle joint, are

applied, somewhat as strapping is applied in the treatment of chronic ulcers of the leg. It is not advisable to use straps narrower than one inch, as they may cut the parts by a curling up of edge of the plaster. Over this a firm roller bandage is applied, and the patient is directed to get up and walk. The adhesive plaster causes a firm and even compression of the parts, acts as a light splint, prevents exudation, and permits motion, which in the mild cases is desirable.

In the more severe injuries, when ligaments are torn across, muscles ruptured, synovitis or bursitis present, the parts should be strapped, and then foot and ankle encased in a plaster-of-Paris or sili-

cate-of-soda splint. Care should be taken that the foot be put up at a right angle with the leg, and in a position of varus, not of valgus. The strapping in all cases should be renewed in a few days, as, when the swelling subsides, it becomes loose. The plaster-of-Paris must not be left on too long, as when acute symptoms subside motion is desirable, to prevent adhesions and stiffness of the joint. If extreme swelling or inflammation have occurred before case is seen, then heat, cold, the various antiphlogistics, may be used, and after these massage and electricity. Support is needed as long as there is swelling or marked tenderness. — *Four. Am. Med. Assn.*, Aug. 1, 1891. J. R.

## THERAPEUTICS.

**Von Ruck (K.). Is Tuberculin a Failure?**—The writer, after alluding to the exceptionally good facilities he has had for observing the effects of Koch's remedy, continues as follows:

Unfortunately the theory of production of a coagulation necrosis with subsequent harmless absorption under the use of large and increasing doses of tuberculin proved erroneous and the coagulation necrosis did not occur at all, the effect being either in favorable instances a connective-tissue formation, or it turned out that the necrosis was the ordinary form attended with destructive suppuration and its dangers.

Nevertheless, many experimenters who used the remedy in what we all now consider too large and too rapidly increasing doses saw and reported improvement and apparent cures, some of them most remarkable and in unmistakable relation to the use of the remedy, while in other cases a rapid increase of symptoms and decline of the patient stood in presumable relation to the effects of the treatment with large doses of tuberculin.

Most of the results obtained and reported up to a few months ago, and in some instances even to the present time, were obtained under the original mode of administration, *with purposely induced general and febrile reactions*, and this both in Europe and this country, and no distinct public utterances against the production of these constitutional febrile reactions or large doses were made in Germany until quite recently, although Dr. Paul Guttman and

Professor Ehrlich reported in March their trials with minute beginning doses of 1-20th of a milligramme and very gradual increase, with better results.

Von Ruck makes a special point in regard to the commencing dose. He regards the large doses (as 10 milligrammes) as not only useless but positively dangerous. By their use many patients have undoubtedly been hurried to death. — *Univers. Med. Mag.*, Sept. 1891.

**Kinnicutt (F. P.) on the Treatment of Visceral Tuberculosis by Koch's Method.**—At the recent Congress of Physicians in Washington, Kinnicutt reported his results as follows: Of his cases, 13 were of pulmonary tuberculosis, 7 had surgical tuberculosis, 6 lupus, 5 joint trouble, 4 intestinal trouble, 2 bone trouble, 2 tubercular prostatitis, 1 epididymitis, and 8 had rodent ulcers. At the end of a month, some grew better and went to the country. He found that preparations of tuberculin, prepared fresh for every injection, are much better than kept solutions, especially than the carbolic-acid solution, which he does not consider good. In pulmonary tuberculosis the result of the general reaction was a guide to reinoculation. The subsidence was graded by the patient's feelings, and the general condition was considered. The inoculations were usually repeated at long intervals. In one case there was two weeks' interval between the inoculations. The same line was followed in joint tuberculosis and in bone tuberculosis, and after each

injection the strength was gradually increased when the local reaction had subsided. Of the 13 cases of pulmonary tuberculosis, there were: *A*, those with noticeable improvement in every respect; *B*, those with improvement in some respects and not in others; *C*, those that deteriorated. Of class *A*, 5 cases were from seven to forty-two years old. There was a predisposition in 3 cases; 2 were of long duration. In all there was loss of strength and cough. In none was there a history of night-sweats. There was high temperature in 4, and not so in 1, before inoculation. In 4 there were physical signs, and in the remainder there were no marked physical signs. The larynx was affected in 1 case; 3 improved in eleven, thirteen, and fifteen weeks, and the worst symptoms subsided. There was a gain of weight and decrease in the amount of sputum, although at first the sputum was increased in amount; the sputum and cough were absent on discharge. There were bacilli in abundance in 4, and in 1 they could not be detected, although the clinical history undoubtedly pointed to phthisis. Prudden had counted the number. He diluted with a solution of borax in water and let stand in a jar, and then counted on a cover-slip in portions of about one c.c. If there were, say 400,000 in a cubic centimetre, there were about 800 on a cover-slip. In two cases the pulmonary signs almost disappeared, so improved were the cases. There was no hæmoptysis. The cause of this disappearance of the signs and the improvement of the cases may have been due largely to the cod-liver oil and creasote the patients were taking, or to both, as such medication had been used before, but not, however, on improved diet and with such hopeful prospects. In class *B*, in several there were some very decided laryngeal symptoms. In class *C*, some cases got better at first, but after a long time got worse again, the apices softened, and there were undoubted signs of a cavity.—*N. Y. Med. Record*, Sept. 26, 1891.

**Nadaud (M.) on Treatment of Pulmonary Tuberculosis by Hypodermic Injections of Aristol.**—The injections were made with a liquid composed as follows: Sweet almond oil, 100 c.c.; aristol, 1 cgm. Twenty-three patients were treated with this remedy, no other medication being employed. In seven cases there had been such an amelioration of symptoms that it

was believed that a cure had been brought about. This improvement had lasted from three to four months. The duration of the treatment varied between twenty-five and thirty days.

In five cases, after a rapid improvement in the months following the cessation of the treatment, certain accidents appeared which necessitated a second course of injections. Generally the relapse was slight, and all the patients resumed their former occupations. In no case was a resort to a third series of injections necessary.

Three patients presented large pulmonary cavities, and were not locally or generally at all benefited by aristol. Two died in course of treatment, one from diphtheria and the other from tubercular peritonitis. Finally, six cases are still under treatment, and present for the most part an evident improvement.

Nadaud concludes as follows:

1. Aristol introduced into the system by the hypodermatic method is in no way toxic.

2. It is eliminated principally by the respiration.

3. Aristol acts as an antiseptic and a modifier of nutrition.

4. The effects are very prompt, and commence to manifest themselves on the sixth or seventh day of treatment by a lessening of the cough and a suppression of the night-sweats.

5. After twenty days of treatment a gain is generally noted in bodily weight.

6. It is in the first and second stages of the disease that aristol is useful. When cavities exist and the expectoration is purulent, the effects are negative or at best but slightly marked.

7. The injection of aristol does not produce any inflammation of the skin in the place where the puncture is made, no abscess, scars, or point of induration. It is slightly painful.

On *a priori* grounds, the procedure advocated by Nadaud is logical, since aristol, the biniodide of thymol, is a body composed of substances eminently antiseptic. Too much stress, however, should not be laid upon any new plan of treatment until it has been thoroughly tried, nor until sufficient time has elapsed to show that reported "cures" are such in fact as well as in name.—*La Tribune Médicale*, Sept. 17, 1891.

**Gregg (W. H.) on the Administration of Guaiacol Iodide by the Intestines in the Treatment of Tuberculous Disease of the Lung.**—Guaiacol is certainly the most active therapeutic agent we possess at the present time for the treatment of pulmonary tuberculosis, but it has to be taken in large quantities. Physicians who are satisfied with a daily dosage of a few grains—a quantity too small to produce any marked effect—need not hesitate to give by this method thirty to fifty grains without fear of overdosing—since guaiacol does not become poisonous for man until a hundred grains have been absorbed.

This method of administering guaiacol offers the greatest encouragement, for under its use the patient soon recovers weight and strength. He assumes a healthier aspect and experiences sensations of returning vigor and comfort. The cough lessens, the expectoration becomes gradually less, the pulse diminishes in frequency, and a general amelioration of the symptoms is to be observed. Perseverance in treatment is the only sure course to pursue, and offers the only hope of permanent success. The stomach is remarkably intolerant to this class of remedies, and revolts even after a few grains have been taken. Hypodermic injections enable us to introduce larger quantities into the system, but only with the greatest precaution and by fulfilling the most difficult practical conditions. The remedies must be distilled to the required degree, and the instrument absolutely aseptic, and to inject the necessary quantity usually occupies two hours.

With a view of overcoming these obstacles it was decided to administer guaiacol by the intestines. In those cases where it has been carried out it has been proved that this method has no drawbacks. The signs that the drug has been absorbed rapidly make their appearance, and in the most characteristic manner. The patient tastes the guaiacol almost at once; the urine changes color and becomes greenish-black or blackish. The administration of guaiacol in an enema is a simple and practical method, and one to which consumptives themselves do not object, and in a word gives such remarkable results that the therapeutical effect of the drug is carried to its highest power. One dose in twenty-four hours is sufficient.—*N. Y. Med. Jour.*, Sept. 26th.

**McGuire (Hunter) on the Cataphoretic Treatment of Goitre by Iodine.**—About six months ago he demonstrated that by means of a cup-shaped electrode attached to a galvanic battery it was possible for a solution of the muriate of cocaine to be driven into the skin and complete local anæsthesia produced. A small piece of absorbent cotton, or piece of blotting paper, saturated with the solution of cocaine, was put into the shallow cup of the instrument, and the electrode attached to the positive pole of the battery. The electrode was then placed upon the skin where the insensibility of anæsthesia was desired, and the sponge on the wire joined to the negative pole was placed on some convenient neighboring part.

It required a current of four or five milliampères to drive the cocaine through the skin and make the anæsthesia complete, the insensibility extending for some distance below the surface of the skin.

A day or two after the above demonstration was made (about January 10th of this year), a case of enlargement of the thyroid gland came into his hospital (St. Luke's). The goitre was bilateral, old, very large, hard, and seriously interfered with respiration. It had resisted for years the ordinary treatment of such growths. Internally, the iodide of potash, iron, and mercury had been faithfully tried; and externally, at different times, iodine and biniodide of mercury frequently used. The goitre steadily grew; and, lately, its increase was so rapid that the lady, in great alarm, came to the doctor to ask for some surgical operation. She had spasmodic attacks of palpitation of the heart, frequent spells of giddiness or vertigo, but no ocular protrusion.

Instead of attempting the removal of the gland he determined to use iodine in the cup-shaped electrode and see what effect it would have on the growth. The doctor put in the cup of the electrode some absorbent cotton first dipped in water and squeezed as dry as possible; and on the cotton he poured ten or fifteen drops of the tincture of iodine. The electrode, thus prepared, was placed on the most prominent part of the goitre, the negative pole on the back of her neck. The galvanic current was then turned on until the milliampère-meter showed the strength of six or eight. This current was kept up

for ten minutes. While using it she said that she tasted the iodine, and afterward that this metallic taste in her throat lasted for hours.

When the electrode was removed the cotton was found simply stained with the iodine, but most of the iodine had disappeared.

This application of electricity and iodine was repeated every day for three weeks. Not always, but nearly every time she said that she tasted the iodine, and said that this was the most disagreeable part of the treatment. The tumor gradually grew smaller, at first quite rapidly, but afterward more slowly, getting more and more indurated as it contracted. The cardiac and cerebral symptoms disappeared completely.

This patient, after three weeks, was called home by the illness of her child, and did not come back for a month. The goitre, however, continued to decrease while she was absent. When she returned the applications were again made daily for three weeks. The gland was reduced to about one fifth of the size it was when the treatment was begun, and in spite of all further use of the remedy remained stationary. But all of the subjective symptoms were gone, and the lady left in excellent health.

Two other cases of chronic goitre were treated in the same way, and with the same results, the hypertrophy diminishing rapidly at first, then more slowly, then reaching a point where it became stationary.

In four cases of recent hypertrophy of the thyroid gland in young women the enlargement rapidly disappeared under the use of these measures.

Iodine and electricity have of course been long used for goitre. As to how much of the good obtained above is due to one or the other of these agents the speaker does not know.

Lately, in a case of pronounced exophthalmic goitre, he used this treatment with quite rapid diminution of the enlarged thyroid gland and a decided amelioration of the other symptoms. The tendency to syncope and dizziness was lessened and pulsation of the arteries diminished, but no perceptible change in the ocular protrusion resulted. The case is too recent, however, to report.—*Am. Pract. and News*, Aug. 29, 1891.

**Bicycling as an Exercise.**—The enormous popularity of the bicycle since the "Safety" type has been introduced, makes the question of its use an important hygienic and medical problem. A writer in the *New York Times* quotes the following comment of a physician:

"I must put my boy at a gymnasium to counteract the effect of his Safety, which his mother persuaded me against my better judgment to buy for him. I am strongly opposed to bicycles for growing lads. It develops a little leg and arm muscle which any ball-playing, running boy gets without it, and it also develops very frequently round shoulders and contracted chest. At least it does in my son, and he was a straight lad with a good breadth of chest before he began to ride."

Against this opinion, however, must be set one quite different, heard at the same time. "It all depends on the way a boy begins, whether the exercise is beneficial or not," was the comment of a second father; "he should not be allowed to teach himself, but be sent to some instructor, from whom three or four lessons will suffice. He will be taught to mount properly, sit well, and ride in an erect position. It is as important as to be taught how to ride a horse. Any boy or man can stick on a horse, but there is every difference in the manner in which boys and men ride the animal. I am convinced that bicycling is a good exercise for a growing boy, with plenty of pleasurable profit in it, if it is properly done."

We recall the opinion of some English writers on this subject who asserted that a urethral stricture might be produced in boys by its excessive use. Such a danger is probably purely fanciful in connection with modern bicycles and properly constructed seats, for the weight of the body does not come upon the perineum at all. On the whole, we believe that medical opinion inclines to favor the bicycle as a means of exercise, as containing very few elements of harm or danger. It can only be said that excessive addiction to the machine, especially the indulging in racing, and faulty methods of holding the body, will do harm, particularly to growing boys.—*N. Y. Med. Record*, Sept. 26th.

**Da Costa (J. M.) on Gastric Ulcer Cured by a Diet of Ice-Cream.**—CASE 1.—In September, 1888, A. E. L., thirty-five years of age, unmarried, presented her-

self at the clinic. Three months previously the patient had applied for the treatment of what she considered aggravated dyspepsia. The symptoms then were localized pain in the epigastric region, more intense on pressure. The corsets had to be put aside, and later on the parts became so sensitive that the front of the dress could not be fastened. At first, food was rejected about from twenty to thirty minutes after it had been taken into the stomach; but later on, it was expelled at once. Blood appeared in the vomited matter—indeed, on one occasion there was distinct hematemesis. Some weeks previously to her visit to the clinic, the patient had eaten a small quantity of ice-cream, and to the surprise of all, it was retained by the stomach. After this she constantly expressed a desire to have an unlimited quantity of this agreeable nourishment, but owing to the fears of the attending physician as to its possibly injurious effect, she was allowed but a little.

At the time when she applied at the clinic she complained of continuous pain extending from the epigastric region in front, to a point between the first lumbar and the last dorsal vertebra; the slightest pressure over either of these regions was unbearable. During the first three months of her illness, she had lost twenty-five pounds in weight. Every article suggested as a means of diet was met by the answer that it had already been tried. It was advised that the patient be given iced milk with thirty drops of the aromatic spirits of ammonia to the glassful; should this fail rectal alimentation to be resorted to. Ten days later it was reported that the patient rejected the medicated milk, and that all artificially digested foods given per rectum were spasmodically expelled; so this means of nourishment had to be discontinued. At the suggestion of Prof. Da Costa, the patient was then allowed ice-cream *ad libitum*. No attempt at medication was made, as every drug, whether given in capsule or liquid, was vomited as soon as it reached the stomach. The occasional severe paroxysms of pain were relieved by hypodermatic injections of morphia. After the patient was allowed her choice of diet, all severe symptoms gradually began to disappear. From two to three quarts of ice-cream were at times eaten during the twenty-four hours, the smallest quantity taken on any day having been one quart.

At the end of two months, the patient had gained twenty-four pounds in weight; all severe symptoms had disappeared, and solid nourishment was gradually added to the diet, until the patient made a complete recovery.

Two other similar cases are reported with the same method and result of treatment.

It is most likely that the ice-cream in these cases acted partly in virtue of the cold, which, as a local anæsthetic, benumbs the stomach, permitting the act of digestion to go on without pain, and the nourishment to be appropriated. In using ice-cream as a diet in cases of gastric ulcer, too great care cannot be taken in seeing that the article is perfectly fresh, and contains no corn-starch or other ingredients to thicken it. That which is over twenty-four hours old should not be used. Ice-cream may not answer in all cases, but it will be found a most excellent article of food to resort to when other foods cannot be retained. It is a conceded fact that many cases of gastric ulcer get well of themselves, provided the stomach be kept at rest. If, then, an article of diet be given which will allow of the desired rest, and at the same time nourish the patient, we have the best means of bringing about a speedy recovery. By the presence of some food in the stomach we prevent the continued corrosive action of the gastric juice upon the affected surface, a fact that certainly should be taken into consideration when the plan of rectal alimentation is entertained.—*Med. News*, Aug. 8, 1891.

**Stewart (C. S.) on Arsenite of Copper in Diarrhœa.**—Cases are reported as follows:

CASE 1.—Mrs. H., aged thirty-five years, had diarrhœa with varying degrees of severity for two years, and had tried changes of treatment and climate to no purpose. As she had previously a malarial attack, I used quinine in the beginning of the treatment, but the principal remedy was arsenite of copper, the one hundredth of a grain given each day. Improvement was noticeable at once, and in six weeks recovery was complete.

CASE 2.—H. R., two years old, began with an attack of summer diarrhœa, and after a week improved slowly under the usual remedies recommended for such cases, but shortly afterward suffered a relapse, and the condition was fully as bad

as before. Then all treatment was stopped, and arsenite of copper, the one hundredth of a grain given during the twenty-four hours, was continued alone, and was followed by speedy and permanent improvement.

CASE 3.—M. V. C., aged forty years, was a steady drinker and subject to attacks of diarrhoea. The present attack began as a "bilious spell," but the bowel condition grew steadily worse, and despite nearly every remedy offered for such conditions, there was a continual decline, followed by a slow improvement after a couple of weeks. The patient then took a trip to Healing Springs, Ala., but returned in a worse condition than before, with eight or ten stools each day, a considerable elevation of temperature, and the tongue looking like a piece of raw beef, the stomach irritable, and nausea easily provoked. Since hardly anything could be given, arsenite of copper, because of its tastelessness, was begun, and its administration was followed by a subsidence of the bad symptoms and a speedy convalescence.

The physiological action of this remedy has not been sufficiently explained, but it evidently exerts both a tonic and astringent effect, correcting the disorder by restoring a healthy condition of the bowel, and leaving the patient well. The drug is soluble in water, and perfectly tasteless, and, especially with children, its range of usefulness is great.—*Phil. Med. News*, Sept. 26, 1891.

**Seibert (A.). Further Report on Sub-Membranous Local Treatment of Pharyngeal Diphtheria.**—A report on this topic was given at the recent meeting of the American Pediatric Society.

Injections of fresh aqua chlori (U. S. Pharmacopœia) are made into and beneath the false membranes found on the tonsils and other accessible parts of the pharynx, about fifteen drops being injected into each spot; if necessary, from six to eight injections can be made without causing toxic effects. The syringe for the purpose consists of a metal rod and a small plate holding the points of five hypodermatic needles, all attached to an ordinary hypodermatic syringe. Thirty-five cases treated by this method had already been reported. To these were added thirty-seven treated by others, and thirteen treated personally. Of these fifty cases four were of the scarlati-

nal variety. The age of the patients ranged from five months to thirty years, thirty-three being under seven years of age. In forty-two cases the injections of chlorine water proved effectual in checking the diphtheritic process; partial effects were observed in four cases, and no effect in three cases.

Imperfect results were obtained in cases in which inaccessible portions of the pharynx were primarily involved. Of the fifty cases, four ended fatally. In all, eighty-five cases treated by sub-membranous injections have been collected. Diphtheritic paralysis was not noticed in any of these cases. Six died, or about 7.5 per cent.

The conclusion arrived at was, that in pharyngeal diphtheria sub-membranous local injections of fresh chlorine water may, with good effect, be made in all cases in which local treatment is applicable.—*Phil. Med. News*, Sept. 26th.

**Wood (H. C.) on the Action of Cardiac Drugs upon the Size of the Heart.**—By means of carefully mapped out diagrams of the cardiac dulness, made under varying conditions, Germain Sée (*La Pratique Médicale*, June 9, 1891) has been able to demonstrate that the area of cardiac dulness, and hence the organ itself, is subject to varied modifications in size, dependent upon a periodic weakness, with flaccidity of the muscle and loss of its elasticity, a condition which is well marked in acute febrile diseases, chlorosis, and in various affections of the digestive apparatus and of the female genital organs.

The application of this mensuration of the heart to the study of the physiological action of cardiac drugs adds something of value to our knowledge of their therapeutic effects.

Sparteine most strongly and most promptly reduces the dimensions of the heart, and most powerfully strengthens its muscular substance and increases its tonicity and elasticity. Diuresis has not been observed.

Digitaline equally diminishes the volume of the heart, but acts principally upon the right cavities, appearing, however, to have this effect only when they have been previously dilated, and therefore only in a pathological state.

Iodide of potassium decreases the size of the heart, but less markedly than sparteine.



Antipyrin increases the total volume without influencing the contractility or the arterial pressure.

Bromide of potassium acts like antipyrin, and consequently is opposed to the iodide. It dilates the heart, perhaps more decidedly the right cavities.

Caffeine has no effect upon the cardiac muscle, but stimulates very efficiently the muscular element of the arterial system, and hence increases tension. For this reason it acts as an excellent diuretic.—*University Med. Mag.*, Oct., 1891.

#### Porteous (I. L.) on Whooping-Cough Treated with Ouabaine.—

This alkaloid has a formula of  $C_{30}H_{46}O_{12}$ , and is obtained by crystallization from a watery extract of the roots of the ouabaïo, a plant nearly related to the *Carissa Schimperi*. Like strophanthus, the juice of the plant is used as an arrow poison by the Somalis of East Africa.

Hypodermically it is more powerful than when given by the stomach;  $\frac{1}{8}$  grain so introduced is fatal to a man. From the experiments of Dr. Gemmell, the standard dose for a child under five years is  $\frac{1}{100}$  grain every three hours in solution. This dose usually lessened the number of coughs and whoops. In two cases, however, where the children were much prostrated by the violence of the cough,  $\frac{1}{100}$  grain and latterly  $\frac{1}{80}$  grain was given every three hours. This is equal to about  $\frac{1}{4}$  grain daily, which is nearly double the strength of the dose advocated by Professor Gley, who estimates the maximum daily dose for an adult as one milligramme ( $\frac{1}{4}$  grain).

I give the results of treatment of three of the cases which have come under my observation, as they are typical of the different varieties met with :

CASE 1.—S. M., aged fifteen months. After having a cough for several days, this little patient had a decided "whoop." On the following day she had at least four whoops. I was sent for and gave her  $\frac{1}{100}$  grain in solution every three hours. On the following day she had only two whoops and less coughing, and from that day she had no more whoops, and the cough, at the end of a week, had entirely left her.

CASE 2.—A. C., aged four years. This patient had suffered very severely for three weeks and was much emaciated. The attacks of coughing and vomiting were very frequent, and what has been called the

"back-draught" threatened to suffocate the patient. I ordered  $\frac{1}{100}$  grain every four hours, and was very gratified to see, at the end of a week, an almost total cessation, not only of the whoops and vomiting, but of the cough.

CASE 3.—C. M., aged forty-five, domestic servant, contracted the disease from children in the house where she lived. She was so bad that she had to leave her place, and, of course, no one would have her. She had been treated by several physicians, and, from the number of empty bottles she had, had evidently partaken of most so-called specifics. She averaged six whoops an hour when I was called to see her, and also had an almost incessant cough. I ordered her  $\frac{1}{100}$  grain every three hours. At the end of twenty-four hours the whoop had come down to one an hour; at the end of forty-eight hours, one every two or three hours; and at the end of a week from first commencing the alkaloid the whoops had ceased and the cough was less severe and less frequent.—*N. Y. Med. Jour.*, Sept. 26, 1891.

**The Insomnia of Continued Fevers and its Treatment.**—In the earlier stages of these fevers insomnia is pretty certain to accompany the hyperthermia, while sleep often attends a fall in the temperature. It would seem that overheated blood is itself inimical to sleep by exciting the cerebrum. Certain it is that cold bathing—the cold or tepid bath—and antipyretics that bring down the fever quiet the nervous disturbances and promote sleep. Hence, for the restlessness and insomnia of typhus and typhoid fevers, there is often no better treatment than a cold bath of about fifteen minutes' duration, the temperature of the water being from 60° to 75° F., and during the bath cold water may be poured on the head in cases of extreme pyrexia with restlessness and delirium. While fifteen minutes ought to be long enough to depress the febrile heat to nearly the normal, in some cases the bath may be of longer duration.

Where the cold bath is impracticable, from difficulties on the part of the patient or his surroundings, some one of the new antipyretics may be tried. There is much testimony in favor of acetanilid as a nervous sedative in fevers. Five grains every hour for three or four doses (in an adult) will generally lower the febrile temperature two or three degrees, and one or two hours

of quiet sleep (especially if the medicine be given in the night-time) is almost certain to follow. By many practitioners and hospital physicians antipyrine is regarded as the preferable hypnotic; the dose should be double that of acetanilid.

These antipyretics, though they undoubtedly have a marked action on the thermogenetic and thermotaxic heat-centres, which are under abnormal irritation by the fever-poison, an action which is extended to the higher cerebral centres, certainly do not affect the infectious agent, and hence the course of the fever is not influenced by them. Their prolonged use is probably attended by some cardiac depression (an evil to be especially shunned in fevers), and the best clinical authorities are shy of them, seeing no permanent advantage in the continued administration of these medicaments, but possible mischief. At the most, their employment is restricted to the obtention of such sedation as is needed for the nervous disturbances.

In regard to pure hypnotics chloral is undoubtedly the best one. Sometimes in the later stages of the fever, 20 drops of deodorized tincture of opium is of service. Sulphonal, chloramide and the newer hypnotics are not of much service. Alcohol, in not too large doses, has a place in this line of therapeutics.

Febrile insomnia is essentially a toxic insomnia; this has been made apparent by the investigations of the last few years. Whether it be the microbes or their ptomaines, or both, which excite the cerebrum and derange the nervous functions, has not been yet positively determined. Uræmia probably enters as an important factor; in the active stages of fevers, and in the declining stages when the circulation is oppressed and languid, and the prognosis is grave, elimination by the kidneys is always imperfect. Hence an important part of the treatment should be to promote the excretion of the poison and the removal of effete matters. Unfortunately, this indication can be but imperfectly met. All that can be done is by suitable nutrients and stimulants to sustain the organic forces in their struggle with the foe, and to favor elimination by the kidneys and other emunctories. The various diluents (lemonade, barley-water, effervescent drinks, plain water, etc.) which are so freely given, because so constantly craved, promote ex-

cretion by the kidneys. Milk is often prescribed *ad libitum* as the sole drink and nourishment; its diuretic properties are well known. Some clinical authorities are in the habit of ordering mild diuretic mixtures (solutions of nitrate of potassium, of sweet spirits of nitre, with sometimes the addition for several successive days of a little digitalis) all through the fever, and claim good results.—*Therap. Gazette*, Sept. 15, 1891.

**Barton (E. A.) on Arsenic in Pernicious Anæmia.**—J. A., a coachman, came to me on November 25. He then stated that he had always been a pale man, but for the last three months had been feeling very weak, and became quickly fatigued on the smallest exertion. For the last two or three weeks he found that there was blood in the mouth on waking in the morning. The patient was tall, very thin, and intensely pale; the conjunctivæ were lemon-colored, the hands pearly white, and the ears looked transparently waxy. The gums were pallid, large, and very spongy, and at the junction of the teeth and gums a thin line of blood was visible. The tongue was clean and very pale, and the lips bloodless. There was no oedema of the ankles. Altogether he looked like a man who had recently suffered a severe hemorrhage. He was short-breathed, and felt faint when standing. The lungs were quite healthy. There was a soft systolic murmur over the cardiac area, probably anæmic in origin. A venous hum in the neck was most marked. The pulse was soft, of low tension, but not markedly accelerated. The urine contained one sixth albumen, and was very pale in color. Three grains of the sulphate of iron was ordered thrice daily.

A fortnight afterwards I had the opportunity of making a careful examination of the blood. The corpuscles were found to be only eighteen per cent. of the normal number, while the hæmoglobin was twenty-three per cent. The corpuscles themselves were of various sizes, and formed rouleaux satisfactorily, but were soft and plastic. There was no leucocytosis. The blood appeared to the naked eye obviously pale and watery. The urine at this time contained the merest trace of albumen, which entirely disappeared in a day or two. On examination of the eyes it was found he could not read ordinary print, and that there were large hemorrhages into both retinæ, especially on the right side. The

iron was discontinued, and liquor arsenicalis was ordered in 5-minim doses thrice daily. He was ordered to remain at home, and was allowed the most generous diet.

Four days after the commencement of the arsenic he had a fit, but when I arrived he had partially recovered, and was fairly sensible, with no paresis. He volunteered the statement that he now saw a red color when looking at the light.

A week after the commencement of the arsenic (which was never increased beyond 5 minims thrice daily) there was no further bleeding from the gums. He had complained for a fortnight of a beating noise in the head, "like a steam-engine." This (in all probability the beating of his own heart) ceased now to annoy him. The urine was normal but very pale. He was allowed to move about his room. His appetite was extraordinary, and, beside the most nutritious diet of strong soups, meat, etc., he took three to four pints of milk daily.

In three weeks he was able to walk half a mile without fatigue, and in a month returned to work. The corpuscles on January 16 (five weeks after the commencement of the arsenic) were seventy-six per cent. of the normal number, and the hæmoglobin sixty per cent. of the normal quantity. The hemorrhages into the retina had entirely disappeared, except for a slight blur on the right side. He could read small print and saw plainly. He continued the arsenic for another five weeks, and is now quite well.—*Therap. Gazette*, Sept. 15, 1891.

**Easley (E. P.) on Poisoning by Antikamnia.**—The following communication was sent to the editor of the *American Practitioner and News*:

On the 6th of last April Mrs. Z., a stout, robust woman, weighing one hundred and sixty-five pounds, twenty-two years old, took, by mistake, for a slight headache, twenty-four grains of antikamnia. In a few minutes she became wildly delirious, then unconscious, and died in ten hours after swallowing the medicine. A careful, methodical *post-mortem* examination failed to discover any lesion, death being the result of the action of the drug alone. The greater portion of her body was cyanosed. The membranes of the brain were of a sky-blue color, as were all the fibrous structures wherever found. The right ventricle was filled with clotted blood very much bleached.

The comments by the editor, with a review of some "antikamnia" literature, are to the effect that it is far too powerful a substance to be allowed an unrestricted sale. Analysis has shown that it is composed of acetanilid (77 per cent.) with the additions of several of the sodium salts.

The small amounts of sodium chloride and sodium sulphate indicate that they are impurities of the sodium bicarbonate used, rather than separate additions to the compound. This would be equivalent to a salt of 90.07 per cent. strength. About the only apparent therapeutic object of the sodium bicarbonate is to make the acetanilid more soluble, and thus of quicker effect. Commercially, of course, the object of adding the sodium salt is plainer with antikamnia at \$1.00 per ounce, and acetanilid about the same price per pound.

In practice antikamnia appears to act more promptly and in a smaller dose than acetanilid, especially when the latter is administered without trituration, and this is due to its being in a fine powder and also to the presence of the bicarbonate of sodium, both of which cause it to enter into solution quicker, and therefore exhibit the physiological effect sooner.—*Am. Pract. and News*, Sept. 12, 1891.

**Reeve (J. C.) on the A. C. E. Mixture.**—I present the special advantages of the A. C. E. mixture as compared with the two leading anesthetics. First, in comparison with ether: It is far less unpleasant and very far more prompt in producing anesthesia. Whatever unpleasantness attaches to the mixture depends upon the ether it contains, and it is less unpleasant than ether, therefore, because less pungent and because the inhalation is of shorter duration before unconsciousness supervenes. The irritating effect of its vapor upon the air passages, the distressing sense of suffocation it causes, the extreme struggling often occasioned, the long time required to produce anesthesia, these are the drawbacks to ether as an anæsthetic. I have witnessed some painful scenes of etherization even in hospitals, under the hands of experienced administrators. I have met with several patients who, for a second inhalation, deliberately chose chloroform, even after fair statement of the relative danger, rather than again undergo the painful sense of suffocation once experienced. In promptness of action the A. C. E. mixture leaves nothing to be de-

sired. In how short a time surgical anæsthesia could be caused by it I cannot say, for rapidity of the anæsthetic process introduces very certainly a new and unnecessary element of danger. By the mixture patients can be anæsthetized as certainly as by chloroform itself, and as rapidly as it is prudent to do it with that agent. It may be admitted that with the closed-bag inhaler, whereby the patient breathes not only the vapor but his own expired air, anæsthesia can be as promptly effected by ether as by any other agent, but in this way the sense of suffocation is increased in intensity although shortened in duration, and the need of a special apparatus places this mode outside the limits of general practice. Parenthetically it may be said that experience has not shown the danger to be increased by this mode of administration of ether.

There is but one point upon which to compare chloroform and the mixture. That point is, of course, safety. Were it not for the greater danger attending its use chloroform would stand without a rival. The proof of that danger, positive and relative, has been so recently ably presented to the profession by Profs. Wood and Hare, that it is needless to go again over the ground. That, when experimenting upon animals, sudden death takes place far more frequently under chloroform than under ether, does not depend upon the testimony of one or of a few observers, but is the universal testimony of experimental physiologists. That in man the death rate under chloroform is considerably higher than that under ether is the conviction of every one who has studied the subject, although the exact rates can never be given in figures. Except in obstetrical practice this agent has too often shown its fatal power, and no one can be a constant reader of a British medical periodical without being painfully struck with the frequently appearing notices of death under its influence. In the great power of chloroform relatively to ether, greater than is that of brandy to wine, can be readily found an explanation of its lethal effect. It is to lessen and to modify this power that the minor anæsthetic and the alcohol are added. But it is not alone as diluents of chloroform that the other constituents act. They oppose to the constant and never-failing depressing influence of chloroform upon the heart their own stimulat-

ing effect. It is true that under ether, sudden failure of cardiac action sometimes takes place; death has occurred quite as suddenly and as unexpectedly under this agent as under chloroform, but depression of cardiac power is very exceptional under ether—it is a constant feature of the action of chloroform.—*Columbus Med. Jour.*, Sept., 1891.

**Weir (R. F.) on Pyoktannin in Cancer.**—"I wish in this connection to say a few words with regard to the new remedy for the cure of neoplasms, and which is known by the name of 'pyoktannin,' as you may be interested to know its therapeutic effects at the New York Hospital. I have made as many as thirty or forty injections with this remedy in cases of cancer of the neck, and without the slightest improvement being noted. In a case of cancerous growth of the upper jaw, it had apparently produced some temporary benefit, causing in certain portions of the mass hardness and a general shrinkage of tissue.

"A patient came to my office a few days ago on whom I used this remedy with some benefit. Three years ago I operated on a private patient with epithelioma of the tongue, removing with the knife the whole of the diseased structure. He was at that time an inveterate smoker, and I advised him to abandon the use of tobacco altogether. He did so and came to my office at a later period asking if he could again take up his cigar. I told him he might do so moderately, but he did not pay any regard to the meaning of the word 'moderately,' and began to smoke at the rate of five or six cigars a day. He soon came back with a whitish film on that side of his tongue from which the epithelioma had been previously removed. The affected tissues were in that state known by the name of 'ichthyosis.' I am always suspicious of any cancerous trouble presenting under such circumstances as this. Many surgeons regard it as a pre-cancerous stage of the disease. I recommended that he should stop smoking altogether, and advised the use of a solution of pyoktannin in the proportion of 1 : 300. After five or six applications of the lotion the trouble disappeared altogether. This only proves, if it proves anything for this drug, that its application where there is a tendency to cancer or changes in the mucous membrane, is of some benefit in arresting the

development of a neoplasm."—N. Y. Letter in *So. Med. Rec.*, Sept., 1891.

**Rich (C. D.) on Peroxide of Hydrogen as a Cosmetic.**—There are some women of the brunette type, usually with an olive skin, sometimes with a fair skin, who have the misfortune to bear upon their upper lip or on the sides of their face, just in front of their ears, a growth of fine, dark hair. The hair is the lanugo variety and is noticeable only on account of its dark color.

The application, by means of a camel's-hair brush, of hydrogen peroxide will bleach the hairs and render them invisible except on very close inspection. As a preliminary measure it is well to wash the growth with a solution of powdered borax in water, to remove the grease which adheres to every hair. The application should be made several times a day until the hairs are thoroughly whitened, and after that as often as is necessary to maintain the color.

The cases in which the above use of it is to be made must be selected. It will not remove superfluous hair or render invisible a luxurious growth, but it will make imperceptible a dark, downy growth on the face of a sensitive girl, and thereby save her much annoyance, perhaps torture. If the hairs be coarse they can be removed by electrolysis, but there are only a few specialists who can remove hair by electrolysis without leaving visible scars, and where the hairs are very numerous and fine it is best not to use that method. Hydrogen peroxide is perfectly bland, unirritating, and therefore will not, like most of the depilatories in common use, caustics, pumicestone, etc., stimulate the skin and increase the vigor and growth of the hair.—*Med. Quar.*, Oct., 1891.

**Fullerton (A.) on Toxic Effects of Cocaine and Their Treatment.**—The writer prefers a 2-per-cent. solution for nasal work, used as a spray. He has seen slight toxic effects after the use of a quantity of solution containing only one grain of the alkaloid. Weak solutions appeared to be absorbed more quickly than strong ones, and therefore 2 grs. in 1-per-cent. solution would seem to be more dangerous than the same quantity in 10-per-cent. solution.

The symptoms may come on in a few minutes, and may last three or four hours, or even longer. In small doses a feeling

of exhilaration is produced, and the mental faculties are stimulated. If the dose be increased largely, a kind of affective insanity may result. If the *spes phthisica* be regarded as a mild form of phthisical insanity, the condition produced by cocaine must also be regarded as such. It would appear to be a kind of mild mania, in which illusions, hallucinations, and delusions have not yet made their appearance. To say the least of it, the mental condition is not normal. Insomnia is a very important and distressing symptom, as those who have used the drug at bedtime know to their cost. A whole night may be spent without the slightest inclination to sleep; but, strangely enough, there is not so much fatigue next day as might be expected to result from the loss of a night's sleep.

The vascular system is affected by even small doses of cocaine. At first the pulse is strengthened and accelerated, but if larger doses be used it may become very weak and irregular, or even slower than normal. The usual result is a quick pulse, which may be found 120 per minute or more. I have often noticed a pulse of 120 after small doses of the drug. Concurrently with this effect upon the pulse there is commonly a sense of tightness in the chest. One feels as if the heart had contracted and drawn in the chest walls with it. This feeling of oppression is very often present, and is sometimes alarming, as there may also be a feeling of faintness, giddiness, or singing in the ears. One feels almost afraid to sit down, and on lying down there is a feeling of suffocation. The breathing is shallow and quick, often from 20 to 24 in the minute after large doses, and frequent sighing takes place. The whole condition is one of tension, like that produced by suspense. The surface of the body is pale, and often a cold sweat breaks out.

The temperature seems to be raised; I have seen it 99.2° on several occasions. But one of the most interesting effects of cocaine is the effect produced on the pupil. It occurs even when only one grain has been used. I have frequently produced it by a spray of one grain in a 1-per-cent. solution. Other symptoms, such as tremulousness and weakness of the knees, are often present.

With regard to the digestive system, cocaine—at least, when applied to the mucous membrane of the nose or mouth—

produces complete anorexia. I have proved this beyond doubt, and have learned to use no cocaine for at least two hours before a meal. If the use of cocaine be long continued, the tongue gets furred and wasting ensues. The urine is of two kinds. First, when cocaine is being used the urine is pale, limpid, and of a low specific gravity. I have noticed the specific gravity to be as low as 1009, when not an abnormal amount of fluid had been drunk. The urine is therefore similar to that of hysterical patients. On the other hand, after the use of cocaine for a day or two the urine becomes high-colored and loaded with urates. The urates disappear when the drug is discontinued, and reappear when the drug is again used. In fact, cocaine seems to cause an increased metabolism, as shown by the increased pulse, increased temperature, wasting, and the deposit of urates in the urine.

There is one other symptom caused by the continuous use of cocaine, and that is cocaine craving. This is similar to that for alcohol, opium, tobacco, etc. In fact, after using cocaine for a few days, it may be necessary to exercise some strength of will to overcome the desire.

The treatment of "cocainism," a term which might be used to indicate the group of symptoms produced by cocaine, is very important. The sleeplessness is sure to cause great annoyance, as it is a very constant symptom. I have used opium, bromide of potash and chloral, bromide alone, and chloral alone. Of these, chloral gave the best results, and opium the worst. Of chloral, enormous doses must be given to produce sleep. It is in very mild cases indeed that twenty grains will be of any benefit. I have used forty grains of chloral and forty grains of bromide without producing sleep. The bromide causes unpleasant symptoms next day, and hence chloral alone is preferable. Nightmare is frequent. A large dose of alcohol in a total abstainer may cause sleep.—*London Lancet*, Sept. 19, 1891.

**Watkins (R. L.) on a Case of Antipyrin Poisoning.**—The patient, a woman about thirty years of age, went to a drug-store, and, complaining of a headache, asked the clerk for something to cure what he pronounced the grip. He sold her a powder and told her to take half of it on her return home, and after waiting a half-hour to take the remainder. In about

fifteen minutes after taking the first dose she became weak, and fell on the sofa in a comatose condition. Her mouth, eyes, and nose were cyanotic, her pulse could not be felt, and her heart seemed to have ceased beating; in fact, for a short time she appeared dead. When she did come to, her prostration was intense and an eruption of white blotches resembling hives appeared on her body, only they were much larger, one blotch extending down the thigh to the knee. The after-effects persisted for two months, during which time she suffered from great weakness, palpitation, the occasional appearance of the eruption, and a peculiar weakness of the sterno-cleido-mastoid muscle. My treatment was simply with sherry wine, of which I ordered her to take a wineglassful at each meal. The analysis of the powder showed it to consist mostly of antipyrin. The weight of the remaining half was twenty-one grains.—*N. Y. Med. Jour.*, Sept. 19, 1891.

**Elliston (W. A.) on Some Physiological Considerations on the Use of Alcoholic Beverages.**—Absolute alcohol, the author said, like all the alcohols, of which they knew there were several kinds, produced symptoms which were classed into four stages—stimulation, narcotism, anæsthetization, and paralysis. If given in sufficient quantity they all produced paralysis of the nerve centres, but the stages were modified by the kind of beverage used, its quantity and strength, and the resistance of the subjects. Having noticed casually the chronic effects of slow alcoholic poisoning, he went on to say, that notwithstanding these disastrous results of excess, alcohol held a high position as a medicine. By increasing the circulation, it might stimulate the functions of all the nerve centres, and render them, for the time being, capable of greater activity. It might thus enable its consumer to think more clearly, to express himself more fluently, or perform feats of greater bodily fatigue than usual. Dealing with the disputed point as to whether alcohol is food or not, he observed that the chief argument in favor of its not being a food, was that it had been stated that it was eliminated in the secretions unchanged; but this seemed to occur only when it was taken in considerable quantities—in small doses it was partly eliminated by the breath, but most of all it appeared to undergo combustion

in the body. The argument in favor of alcohol being a food was, that it was retained in the body, and supplied the place of other foods, so that the quantity of food which would without it be insufficient, with its aid became sufficient. At the same time it caused a considerable increase in the quantity of liquids to be found in the stomach. The beneficial effects of small doses of alcohol were thus readily explained, as also the deleterious effects of larger ones. It followed, therefore, that if alcohol was to be given at all to assist in digestion, it should be administered preferably in small quantities, and best of all immediately before meals; any momentary delay in digestion which occurred before its absorption, being then of no account, while the increased secretion has already set in by the time the food enters the stomach.

With regard to the amount of alcohol that might be taken habitually without apparent ill effects, the late Dr. Anstie, who had given much attention to this subject, was of opinion that the daily dose of alcohol in an adult should never exceed from 1 oz. to 1½ oz. of that substance, in whatever form it may be taken. If that opinion be even approximately correct, they had grounds upon which they could form judgment, and base the advice they were so often asked to give. If they carefully investigated the analyses of the various alcoholic beverages in ordinary use, and particularly to estimate the amount of alcohol probably contained in each, they would, most of them at all events, be inclined to agree with Dr. Anstie that the amount of the ordinary which would contain no more than the amount of alcohol he mentioned, would not be likely to do any harm to the body of an ordinary healthy adult, nor did he (Dr. Elliston) think any evidence could be produced to show that such an amount of alcohol could cause any pathological change. What was wanted for their guidance was a knowledge of the comparative alcoholic strength of the various beverages in daily use. He did not desire to touch on the great temperance question, in which the profession was so much interested, but he could not refrain from stating that he thought much harm was done to the cause of temperance by those who denounced all drinks containing alcohol. Surely there could be no fair comparison between the spirits at one end of the table, and the

comparatively innocuous drinks at the other. But upon the teachings of physiology and their own experience, they must inculcate such teaching as would tend to avoid rashness on the one hand, and fanaticism on the other.—*London Med. Press*, Sept. 16, 1891.

**Mattison (J. B.) on Chloralism.**—Chloralism has largely waned in the last half decade. The advent of other—though not better, in some respects, I am bound to say—hypnotics has lessened the growth of a toxic disease that, ten years ago, bade fair to assume large proportions and wreck some of the best in the land. Its victims came mainly from the educated rank of our people—brain-workers—those who by superzealous devotion to duty, or long and exhausting vigils over mental toil, had banished the “sweet restorer.” Many chloral inebriates were found among the large and—at that time more than now—enlarging number of morphine habitués who were impelled to its use by the inroads of the poppy along insomnic lines. So, too, among rum-takers; the marvellous power of chloral, in wooing the drowsy god, after a big debauch, led to its use—with or without medical counsel—that, at times, could only be called reckless, and that again and again brought the long last sleep.

The author relates the following case recently under his care:

Mrs. A., æt. thirty-seven; began to suffer from insomnia sixteen years ago, which persisted in varying degree until Dec., 1889, when a severe injury, confining her to bed for fourteen weeks, increased this wakeful condition until it became essential to compel sleep. Chloral secured it. The initial dose was 15 grains, at bedtime. This amount sufficed for 14 months, when she began to suffer severe limb pains—not increased by pressure or movement—which soon resulted in a sharp and prolonged bout of hysteria and nervous prostration with increased agrypnia. The chloral dose was doubled, but without effect. During several weeks various hypnotics were tried, with ill success; her physician declared, “In the endeavor to give her sleep I almost exhausted the *Pharmacopœia*.” Finally hyoscyamine was given. This broke the insomnia, but for some reason, after a week’s use, recourse was again had to chloral, and this was continued until a week before coming to us, when a new medical adviser decreased it and gave

hyoscyamus, with the result of much lessened pain but little better sleep.

At time of placing herself under our care, Mrs. A. was weak, sleepless, anorexic, and greatly depressed; her physician wrote, "This chloral taking, with the shock from the horrible injury she received, has almost entirely wrecked her nervous system." The chloral was at once withdrawn, and 40 grains chloralamid given. It brought a full night's sleep, without ill after-effects. During the following fortnight, various hypnotics, sulfonal, paraldehyde, morphine, codeine, hyoscine, somnal, and chloralamid, were used. The last named proved by far the best—always fetching refreshing slumber for several hours—and was continued. Meantime she was placed on large doses of strychnine, and two grains thrice daily of quinine. In ten days increased strength permitted a drive, and in a few days more her appearance at every meal. The peculiar pains steadily lessened, and in a fortnight were a thing of the past. The chloralamid was gradually decreased during a month, and then ended. The strychnine and quinine, after a few weeks, were followed by phosphorus and Fowler's solution, with an eight-minute bedtime galvanic séance. Under this treatment Mrs. A. progressively improved in every way, and at this writing she asserts that "life is worth living," and is "feeling better than for years." To complete and confirm convalescence we have advised, in view of her insomniac record, a sea trip, with a short tour abroad, and the winter spent in Bermuda.

This case is instructive. It proves anew the snareful effects of chloral; yet, despite this and other drawbacks, we consider it, in some form, first among hypnotics. Of all the new claimants for favor in insomnia, the two most effective contain it, somnal and chloralamid. The latter we think the better. While deeming it less likely to enslave by continued use, it certainly is less depressing, and the sequelæ are less unpleasant. We use it largely—dose, 30 to 60 grains on tongue at bedtime—and regard it a very valuable addition to our resources.—*Can. Pract.*, Sept. 16, 1891.

**Williams (T. K.) on Morphomania Followed by Rapid Narcosis.**—The writer was hurriedly summoned to a household where the husband and father, naturally a quiet man, had suddenly become violently insane (as was thought) and driven

all the family out of the house. When the patient was seen his temperature was 98½° F.; pulse full, round, compressible; heart action good; valve accentuation good; pulse gave evidence of sixty-eight systoles per minute. The diaphragm made twenty-two excursions per minute; the velum pendulum palati swung to and fro with only an occasional stertor, between which a noiseless sleep came and went. The pupils were firmly pin-holed, and could not be affected by the most intense light. The sensorium was greatly affected by this present state of narcosis.

Flagellation failed to rouse him. A strong faradic current was then used; the anode was disposed at the dependent root of the phrenic nerve; the cathode at the right margin of scrobiculus cordis, and retained there for fifteen minutes, after which a vigorous effort was made by the patient to disengage himself from the circuit, and this with some considerable effort, after which he became so sensitive to the current as not to be able to tolerate it at all. The sopor remained, but ever afterward a loud call, or a touch, brought forth a response. All traces of the narcosis and sopor had vanished at 4 A.M., and he was on his feet ready and willing to engage the day and enter into the duties thereof. At the usual business hour he was at his post of duty, nor could there be traced in his unruffled countenance the scar of a vexatious dream, or the footprint of an unbridled nightmare; not the slightest trace in the lineaments or physiognomy that bore evidence of the night's adventure.

From the foregoing history the following deductions are worthy of consideration:

Conditions, not medicaments, are always best antagonized.

Because a narcotic has been ingested, that fact does not warrant a *prima facie* conclusion that it will enter the chemistry of the system, or disturb the physio-chemical morphosis to that extent as to make vital conditions incompatible.

The danger of carbonic acid in opium narcosis is almost *nil*. When vital morphosis is retarded the elimination of CO<sub>2</sub> is materially affected and almost suppressed.

Excitation of the respiratory centres is the readiest, if not the surest, way to excite and perpetuate heart action, on account of the reciprocity of these functions, induced by the most intimate connection of the parts.



An attempted antagonism, without the aid of a galvanic or faradic current, is an effort of doubtful results.

Atropine, caffeine, strychnine, and quinine (in i gr. doses, at short intervals), are the most trustworthy medicaments.

The hypodermic system of exhibition should have preference.

If the circulation is not adequate to the task of carrying the medicaments to the centres, then work the respiratory centres cautiously, as long as they will respond to the galvanic or faradic current; but do not exhaust this function by too repeated demands on its working capacity. The diaphragm should not be made to make more than twelve excursions per minute.—*Times and Register*, Sept. 19, 1891.

**Smith (F. T.) on Fluorescein and Fluorescin.**—These recent additions to our materia medica are closely allied chemically, both being products in the distillation of coal tar.

They are of use from their faculty of coloring abraded surfaces of the cornea, thus enabling us to locate such abrasions rapidly and accurately. To the oculist this is of but little assistance, as he can readily diagnose these conditions by the methods now in use, and yet in some cases it is of assistance even to him, as in the extraction of small foreign bodies where we must get the substance between us and the iris, or against the black pupil. In these cases, the green ring around the offending material enables us to see it in any position. Likewise, in cases where we have much photophobia, we can tell more quickly and easily to what extent the cornea is involved.

In no other condition than that of abrasion of the cornea is any effect seen, and the action of the solution is limited to the corneal tissue.

Fluorescein is a light brownish-yellow powder, insoluble in cold, very slightly soluble in hot water, but more freely soluble in an alkaline solution; the addition of gr. viiiss sodium bicarb. dissolving 10 grs. in an ounce of water. This is the solution in common use. It is of a dark brown color. The addition of water turns it green, and from the surface we get a beautiful fluorescence.

Fluorescein is manufactured by heating resorcin and phthalic anhydride to 195° or 200° C. (385° to 392° F.). It is of acid reaction. When freshly precipitated it is

readily soluble in ether and alcohol, not so easily when crystallized. Acids may be present as impurities, and are readily detected by greater solubility.

Fluorescein is a yellow powder made by heating fluorescein with a solution of caustic soda and zinc dust. In solubility it is similar to fluorescein, into which it is readily converted by oxidizing agents.

Gr. viiss sodium bicarb. dissolves gr. x in an ounce of water. The solution is dark brown, and turns green on the addition of water, with fluorescence. Its behavior on the abraded cornea is exactly similar to that of fluorescein.

In conclusion I would say that we have here agents of some value, especially to those not accustomed to eye affections.

The solutions are not painful in the least, either to the normal or to the inflamed eye. They are also non-irritating. I have used them in cases where the eyes were so irritable that no solution (except salt water or a solution of boracic acid) could be borne without pain and increased redness, and there was not the slightest irritating effect.

There are no bad after-effects. The coloring matter is gradually diffused through the corneal tissue and absorbed, this taking from one to several hours according to its amount.

They are of value only in diagnosing corneal abrasions (ulcers, foreign bodies, abrasions), while in other affections their effect is *nil*.

As a sign of death the solutions may have a proper place.

In testing the permeability of strictures of the nasal duct they are of assistance.—*Four. Am. Med. Assoc.*, Sept. 26, 1891.

**A New Antiseptic.**—No sooner is one antiseptic chemical rejected by some disappointed disciple of antisepticism than he is greeted by a new chemical possessing all the virtues and free from all the vices of its predecessor. The list commenced with the peerless carbolic acid and its many preparations, all of which made way for the ill-smelling iodoform or the poisonous corrosive sublimate; these in turn were pushed aside for newer and more popular remedies, until "aristol" claimed notice; still, however, the search goes on, and of course the demand begets a supply. Dr. Berlioz now presents to the Parisian Academy of Medicine a new chemical which already has proven itself

worthy, if we accept the statements of its advocates, of general recognition as the best of antiseptics. He names it "*microcidine*," a name which it is hardly entitled to, seeing that its germicide powers are inferior to those of corrosive sublimate. According to Professor Polaillon, the new drug is not a definite chemical compound, but rather a mixture of B naphthol and hydroxylate of sodium. This new product is soluble in three times its weight of cold water, the solution being of a brown color,

which disappears on dilution. The chief advantages claimed for this, the latest of antiseptics, is its slight cost, and that it is non-poisonous. As it is eliminated by the kidneys it should be found useful in cases of chronic cystitis with fetid urine. The value of the naphthols *a* and *b* in the tymp-pany of typhoid are well known, and as "*microcidine*" is simply a product of the fusion of B naphthol with the hydroxylate of sodium, it should prove useful in such cases.—*London Med. Press*, Sept. 16, 1891.

## REPORT ON DERMATOLOGY.

BY CONDUCT W. CUTLER, M.D.

**Davis (W. H.) on Ringworm of the Scalp.**—Dr. McArthur's method is to first shave the hairs from and around the patch, then the part is thoroughly washed with green soap and warm water, after which spts. turpentine is thoroughly rubbed into the affected scalp, and then two or three coats of tinct. iodine painted on with a soft brush and allowed to dry. The carbolated oil is then applied to the whole scalp. If this method is properly practised it requires only about ten days to produce a cure.

Spts. turpentine is a powerful germicide, but it is still a more powerful solvent to the sebaceous material around the hairs. It penetrates deep into the epithelial structures of the scalp, and opens the way for the tinct. iodine, which is a still more active parasiticide.—*Denver Med. Times*, Aug., 1891.

**Van Allen (Dr. F.) on Removing Superfluous Hair.**—Dr. Van Allen highly recommends the following prescription for removing superfluous hair:

B. Powdered air-slaked lime . . . . . 3 j.  
Orpiment (arsenic trisulphide,  $As_2S_3$ ) . gr. ij.

Add water enough to form a paste, and mix. Apply to the hairy surface about a quarter of an inch thick. Allow the paste to remain for fifteen or twenty minutes, when it will be dry. Remove; and the surface which before was hairy will be as smooth as the palm of one's hand, the hair coming off with the paste. The skin may or may not be slightly reddened, but this redness will pass away within an hour or so. After a few days the eaten-off ends of the hairs

will be seen on careful examination, but a second application of the paste will as before destroy the hair. These applications will have to be made about twice a week at first, then once a week, then once a month, etc. The hair grows out at first very much as if it had been merely shaved off; later, on careful examination, each individual hair is found to be thinner than before, growing less strongly, the hair, if black, losing its color, and, in a word, yielding to the continual irritation of the paste. This treatment requires about a year or a year and a half to effect an entire cure, but it possesses the advantage that immediately after the first application the patient is, as far as all outward looks go, completely relieved of her deformity.—*Med. Record*, Sept. 19, 1891.

**Lustgarten (S.) on the Primary Cause of Death following Burns.**—If a patient does not die from shock after receiving a severe burn of the skin, there is usually an interval of several days without the appearance of ominous symptoms, due to the fact that a certain time must elapse before the poisonous substance comes into action, and that a certain quantity of this substance must be formed in order to produce the objective symptoms. The length of this free interval stands in general in an inverse ratio to the intensity and extent of the injury.

The dead skin becomes in most cases the seat of decomposing processes. Micro-organisms of putrefaction, which, lying in the depths of the follicles, have escaped the action of the heat, or which have wandered in later, very soon begin their work; and if the patient lives long enough, we

see as the expression of this that the affected skin turns into a yellowish greasy pulp, swarming with micro-organisms, and is gradually cast off in shreddy layers. The conditions are especially favorable for the development of putrefaction. The dead mass lies in a thin layer on the surface, as in an incubator, and takes up water from the subjacent tissues by diffusion, and under these circumstances poisonous bases of putrefaction necessarily form. The conditions are most favorable, too, for the resorption of the bases, as long as the eschar does not fluidify under the influence of a peptonizing ferment, so that a portion of the poison is carried off in this manner. The therapeutic efforts should be directed to the prevention in every possible way of putrefaction in the eschar. Experience speaks in favor of external disinfection with iodoform powder, and a gauze bandage without oiled silk. This treatment finds support again in the observation of Brieger, that iodoform prevents the formation of cadaverin in putrefaction; which observation demonstrates a marked influence of iodoform on the chemistry of putrefaction.

Another point worthy of consideration is the local abstraction of water in order to render the eschar dry.—*The Med. Record*, Aug. 8, 1891.

**Allan (F. J.) on Treatment of Erysipelas.**—The researches of Fehleisen have definitely proved erysipelas to be due to micrococci, closely resembling the streptococcus pyogenes and the microbes found in puerperal fever, but yet distinct from them in their action. Fehleisen's micrococci are found to develop primarily in the lymphatics, both of the skin and subcutaneous cellular tissue, and it is along their course that they spread; in no case of true erysipelas have the micrococci been found in the blood-vessels or associated with supuration.

The fact that the microbes are found in greatest abundance near the edge of the inflamed surface, shows that the attempt to limit the spread of the disease by surrounding the patch with a line of nitrate of silver was correct in principle, though not always successful in practice. For some time I have employed iodine for the same purpose, and have been very well satisfied with its action. Theoretically, it is well fitted to destroy the specific organism, not only on the skin, but by reason of the

readiness with which it is absorbed in the adjacent lymphatics also.

If the case be seen early, the method I adopt is to carefully paint over the inflamed surface, but especially round the edges, with the ordinary tincture of iodine, and to prescribe a lotion containing one to three drachms of the tincture to six ounces of water, this to be frequently applied to the part; and in order to fulfil the second requirement, and because it is pleasanter to the patient, it is better that the lotion be used warm. On subsequent days the tincture should be painted upon any part where the disease seems to be spreading.—*The Hospital Gazette*, Jan. 17, 1891.

**Allan (C. W.) on Treatment of Erysipelas.**—Since Fehleisen's discovery of the streptococcus erysipellatus and the demonstrations of Hueter and others, which go to show that it is truly an infectious disease in all probability due to the presence and multiplication in the skin and subcutaneous tissues of a micrococcus, methods of treatment have in a measure changed, and the therapy of to-day is based largely upon antiseptic, anti-bacterial, mechanical and surgical procedures. I think the plan of treatment which offers the best results is about as follows:

First, internally, such symptomatic treatment as the nature of the case seems to require. Antipyretics only in case of high or persistent fever (over  $103\frac{1}{2}^{\circ}$  to  $104^{\circ}$ ), then antipyrin in dose of at least gr. xv-xx, for an adult, guarded by alcohol. Cooling drinks. Calomel or saline aperients in full dose if constipation. If much weakness, alcoholic drinks given freely, especially at critical periods, and iron, or iron and quinine; digitalis if much fever and prostration; bromides for delirium; antipyrin or phenacetin for headache, with cold applications to head, and as concentrated and nutritious a diet as possible.

Second, locally, I would paint the patch and surrounding margin of healthy skin thickly with ichthyol in collodion, 3j-3ij to 3j. If the scalp is the region affected, a watery solution or ointment of ichthyol can be employed. To arrest the spread I should in every case make an attempt either with the band of adhesive plaster or by scarification, or both, the latter to follow the former in case the disease spreads beyond the adhesive strips. In erysipelas of the face which had not yet reached the forehead, or at least its upper part, I would

apply a band tightly about the forehead and just above the ears, cutting the hair in a strip around if necessary to secure firm pressure. The chances of arresting the process here should be at least equal to those of checking the spread upon an extremity, for we have a hard, bony base over which to make our compression. If the boundary is passed, then I should at once have the scalp shaved and apply another band higher up.—*Am. Four. Med. Science*, July, 1891.

**Frank (J.) on a Remarkable Case of Skin Disease.**—The case is unique, not alone in the fact that the shedding of the cuticle and nails of the hands and feet was complete, but in its repetition for thirty-three consecutive years, on the same day of the month, and within a few hours of the same time of the day.

The patient first remembers the shedding in 1865, when the cuticle and nails were cast off while at play. These attacks have been repeated each year on the 24th of July, usually at 3 P.M., and never later than 9 P.M.

The paroxysm begins abruptly. Patient has a feeling of lassitude and weakness of fifteen to twenty minutes' duration, followed by muscular tremors, nausea and vomiting, a rapid rise of temperature; skin and mucous membrane of tongue and mouth become red and inflamed, and are hot and dry. No perspiration appears after the paroxysm begins until the cuticle is cast off.

The acute symptoms begin to subside in from three to four hours, and are entirely gone by the end of twelve hours, with the exception of redness of the skin which does not return to its normal color for thirty-six hours more. The patient has been delirious three times during these attacks, once for nine days.

In his early life the cuticle began to be shed on the second or third day after symptoms appeared, and was complete by the fifth day; but each succeeding year it takes a little longer, until now it is ten or twelve days before shedding is complete. The cuticle can be detached in large sheets, and he has always been able to remove it from the hands and feet in one piece in the form of gloves and moccasins.

The nails are loosened and crowded off in about four weeks after the acute stage.—*Am. Four. Med. Science*, Aug. 9, 1891.

**Syphilis in Iceland.**—Iceland is one of the few countries in which, according to the statements of all competent writers, syphilis does not exist. The malady is reported to have been introduced into the country from without at several different epochs, but it has never taken root, so that the theory has been advanced that the people of this island possessed a certain immunity from the disease.

Dr. Schierbeck, the foremost medical authority in Iceland, says that in the course of eight years' experience upon the island he had met with but four well authenticated cases of syphilis in native Icelanders. This is sufficient proof that the theory of immunity is untenable. All of these cases were acquired in foreign countries, and he knows of no case occurring in people who had never left the country. This shows that syphilis is not a common occurrence, and is in no sense so widely spread as in most other countries.—*Boston Med. and Surg. Four.*, Aug. 15, 1891.

**Ohmann-Dumesnil on Disseminate Parasitic Perifolliculitis.**—The first symptom noticed is a burning of the skin accompanied by more or less itching. An examination of the affected part shows that small red macules, of the size of a pin's head, more or less aggregated, are present. In the centre of each one of these macules is a rather coarse lanugo hair. The color of the macule is a bright red, closely bordering upon the scarlet, and suggesting an acute inflammatory process. In a short time, varying from forty-eight hours to three or four days, the character of the lesion changes. It becomes yellow in color, painful to the touch, and itches more. If a hair be extracted or the epidermis be punctured a drop of pus exudes. It has become distinctly pustular. Scratching opens the pustules easily and readily, and the contained pus is found to be of an auto-infectious character. If the patient scratches the affected and then the unaffected parts, the latter become infected and the seat of a similar process.

The portions most affected are the anterior surface of the thigh, of the leg, the chest, the axilla, and the dorsum of the hand. In the majority of the cases it is upon the anterior surface of the thigh that the disease is first observed, consisting of a few macules.

One method of treatment which is very simple is to order the application of

campho-phenique to every portion of the affected surface. The pus, as in every method, should have been previously evacuated, as stated above. The surface should be kept continuously moistened with the remedy, and a rapid result is obtained.—*New Orleans Med. and Surg. Jour.*, Sept., 1891.

**Bulkley (L. D.) on Ointments.**—Careful directions should always be given to patients exactly how to apply ointments, how frequently to make the application, when to change the dressings, and what to do with the part before and after applying the ointment.

The majority of patients will be inclined to apply ointments at night, and then to wash them well off in the morning. Now, in very many conditions, this procedure is absolutely fatal to any successful treatment, and it is readily seen that the application of a remedy for only one third of the twenty-four hours can have very little effect, while the act of washing will sometimes more than counteract the benefit derived from the ointment.

Where it is desired to keep a part continually under the effect of an ointment, it should be soaked in it, if it were possible, as completely as though the part were immersed in a very large mass of the same; but as this is not possible, we have recourse to lint, and the ointment, which should always have considerable body, is spread to a very thick layer on the woolly side of the lint, and then firmly bound on the part.

The glycerite of starch forms a good basis for ointments, when fatty substances are not well borne, or when it is desirable to remove the application frequently with water.

Lanolin is too sticky, and not easy of application, and, moreover, it will often prove irritating to a delicate skin. While it was thought to afford a means for the more ready absorption of medicaments, more experience has shown it to be questionable if this is the case. Lanolin, however, is useful as an addition to certain ointments, in the proportion of about 20 per cent., to give an adhesive quality to them, thus securing a firmer and more adherent coating for affected parts.

Vaseline is by no means always agreeable and non-irritating to the skin; indeed, many individuals are found who cannot bear them on the skin at all. Most of them, vaseline particularly, have not body

enough to form good ointments, although for simple inunction, as a lubricant, or for the application of carbolic acid to the skin as an antipruritic, vaseline serves the purpose very well.

The best ointment of all, when fresh and properly made, to use as the base for other ointments, is the *unguentum aquæ rosæ*,—the cold cream of the Pharmacopœia.—*Therap. Gaz.*, Aug. 15, 1891.

**Ohmann-Dumesnil on Comedones.**—Unna has devised a preparation which he claims will not only cause the apparent disappearance of the comedones, but will also exercise sufficient tonic action to diminish and finally abolish the tendency to their formation. The formula in question is as follows:

B	Lanolini puriss. . . . .	10.
	Vasellini . . . . .	20.
	Hydrogen. peroxid. . . . .	20-40.
M.		

This mixture is to be applied to the affected parts and allowed to remain. This can be easily done if the application is made at night. If it can also be applied during the daytime a further advantageous action is secured.—*St. Louis Clinique*, June, 1891.

**Lydston (G. F.) on Psorosperms in Paget's Disease.**—It has been claimed that there exists in the so-called Paget's disease a peculiar and characteristic body that Darier has termed the *psorosperm*. The psorosperm is a peculiar round, colorless, cell-like body, and, according to Darier, is a vegetable parasite; others claim that it is not parasitic in character. Whether it has any definite causal relationship to Paget's disease is a question. Darier classifies the various affections in which it occurs as *psorospermiosis follicularis cutis*. The point that militates against the psorosperm of so-called Paget's disease is the fact that a similar cell has been discovered in several other affections; in molluscum contagiosum there is an identical body. Cornil has discovered a similar cell in certain cases of uterine cancer. As far back as 1876, Malassez demonstrated similar bodies in various forms of epithelial growths; so it is a question as to the precise causal relation of the psorosperm to Paget's disease. As Sir James Paget knew nothing about psorosperms when he classified his peculiar form of epithelioma of the nipple, I am privileged to believe that

this is precisely the same affection he described.—*The Med. Age*, March 10, 1891.

#### Giovannini on Canities Unguium.

—Under this title Professor Giovannini has recently communicated to the Reale Accademia di Medicina of Turin a singular case of altered coloring of the finger- and toe-nails. His patient, a young man of twenty-nine years of age, presented the unique spectacle of having all the nails of his body, throughout their whole extent, deprived of their natural tint, which was replaced by a "white opacity" (*bianco-opacità*). They began to lose their color about the twelfth year, during convalescence from an ileo-typhoid illness, and the alteration was maintained with progressively increasing intensity till they had assumed the aspect they now present. Under the microscope they were found to contain, enclosed in their tissue, an abnormal proportion of air, and this Dr. Giovannini gives as the explanation of their "white-opaque" coloring. This cannot, he thinks, be a case of common leucopathia, as "the affection pervades the entire lamina of the nail, and, besides, is persistent." That the phenomenon should be restricted to the nail, without extension to the hair and skin, is certainly curious.—*Lancet*, July 4, 1891.

**Patterson (R. G.) on Treatment of Chronic Eczema with Creolin.**—The most useful strength is that of one drachm of creolin to eight ounces of water—roughly speaking, a teaspoonful to half a pint of water. In this proportion, from which I have never varied, it forms a bland and soothing emulsion, milky in appearance, and with a strong tarry odor, which has a marked effect in allaying irritability and itching, prevents the formation of scabs and crusts, and appears in a striking manner to moderate the pus-producing activity of certain forms of eczema. The mode of applying it which I have found most efficacious is the following, which though applicable in the majority of instances, must yet, like every other remedy, be modified to meet individual cases.

The parts affected, having been freed from crusts or other accumulations, by appropriate means, should be freely bathed in the freshly prepared emulsion for from ten to fifteen minutes. If the disease is in the acute stage, or if there is much secretion, lint soaked in the liquid may be applied over all parts, and retained in

place by suitable dressings. But if the eczema is of the squamous type, treatment in the intervals is best carried out by means of ointments—that which has yielded in my hands the best results being one composed of zinc oxide, white precipitate, and the glycerine of the subacetate of lead. Under this treatment recent cases recover with astonishing rapidity, and even cases of long standing soon show signs of improvement which, in the majority of instances, goes on to complete and permanent recovery. In only a few instances has it failed to do more than alleviate the condition.—*Dub. Journal Med. Sci.*, July, 1891.

**Binnie (J. F.) on Ichthyol in Phlegmonous Erysipelas.**—To obtain the best results from ichthyol in erysipelas there are certain rules which must be attended to :

1. Ichthyol is most useful when used early, and the application made frequently.
2. The application must be as extensive and thorough as possible.
3. The air must be excluded.

These rules are applied or objects attained as follows :

"All the neighboring mucous membranes and skin must be cleansed with a concentrated solution of salicylic acid. Any wounds which may be present, disinfected with sublimate solution (1 : 1000) and covered with sublimated gauze. Then, not only the reddened skin, but the normal also for a hand's-breadth around is to be thoroughly rubbed for from ten to fifteen minutes with pure ichthyolated ammonia, or with that drug combined with lanolin (in equal parts or 2 : 1). This rubbing is like gentle massage, and must be as thorough as the pain will permit. By this rubbing so much of the drug is absorbed that the affected skin presents a brownish-red appearance. Over the whole of this area a layer of absorbent gauze, moistened with a solution of salicylic acid, is spread, and this dressing is covered with a thick sheet of *non-absorbent* sterilized cotton. . . . Ichthyol is easily rubbed in, even where the hair is long, and is readily removed with hot water and soap. The dressing is changed daily."—*The Kansas City Med. Record*, March, 1891.

**Lockwood (G. R.) on Purpura Hæmorrhagica (Werlhof's Disease).**—Dr. Lockwood, in an exhaustive paper on this disease, concludes as follows :

1. Werlhof's disease is probably infectious in origin, the exact infection not having been absolutely proven, though probably it is the bacillus described by Letzerich.

2. We meet acute cases of this infection, in which death results from acute anæmia, from internal hemorrhages, or from sepsis.

3. Purpura simplex and purpura rheumatica are probably types of different grades of the same infection, and this infection may be the same as that of Werlhof's disease.

4. Scurvy, if proven an infectious disease, may be really Werlhof's disease modified by the surroundings and poor condition of the patient, and also by the possibility of the infection being more chronic.

5. Drug purpuras, anæmic and cachectic purpuras, purpuras in exanthemata and other infectious diseases, purpuras in newly-born, in endocarditis and multiple sarcomata, as well as those of neural origin, may present all grades of severity; that we can in each determine a cause, though we do not know exactly how the symptoms are produced by this cause, whether by blood-changes or vessel-changes, or from nervous causes; but these purpuras are symptomatic and not essential, and should not be classed with purpura hæmorrhagica, or Werlhof's disease, until we are more enlightened upon this subject.—*New York Med. Record*, Feb. 7, 1891.

**Barendt (F. H.) on Inunctions as Practised in the Vienna School of Dermatology.**—The inunction is carried out very thoroughly, and every possible precaution is taken to prevent salivation or any untoward local effect. The inunction sittings take place in the following manner: The patients first of all go through the process of teeth cleaning. The tooth cleaners are little mops made of charpie. These are moistened in a dilute carbolic lotion, and dipped into charcoal powder. The teeth are thoroughly rubbed. After a few minutes the mouth is rinsed with the lotion, then an astringent powder (composed chiefly of rhatany root) is used, and completes the toilet of the mouth.

Inunction then commences; each patient even now keeps his mouth full of the dilute carbolic lotion—with the twofold object of impressing on his mind the importance of attending to his mouth, and of preventing him from talking to his fellow-patients. The ointment is rubbed in in different regions daily, so as to guard against any eczema; when it is completely worked in, a dusting-powder is dredged over the surface. Those regions—the infra-scapular and lumbar—that are difficult of access to the patient himself are done by another patient, and so on in turns, so that each patient gets his quantum of blue butter daily.—*Liverpool Med. Clinic*, Jan., 1891.

## REPORT ON SURGERY.

BY GERTRUDE B. KELLY, M.D.

**Barling (G.) on a Case of Hæmo-Hydro-Nephrosis Due to an Injury** (*Birmingham Med. Rev.*, July, 1891).—R. W., aged fifty-four, came into the hospital with a large tumor occupying the front of the abdomen, on the right side. It extended upwards to the costal arch, downward to the brim of the pelvis, and nearly to the middle line, but did not present at all distinctly in the lumbar region. Palpation gave the impression of a very tense cyst; there was no resonance over the front of it, such as usually exists in renal tumors. The skin and subcutaneous tissues moved freely over the tumor, but the muscles were tightly stretched over it giving the impression that it might be intermuscular. The history was as follows: two years

before admission the patient's wife, when getting into bed, slipped, and knelt on his right side with some force, causing very severe pain for a short time. Six months ago a swelling as large as an orange was noticed. This slowly increased in size until two weeks ago—since which time the increase has been rapid.

Puncture with hypodermic needle drew off brown-colored fluid which contained blood-corpuscles, large granular or exudation corpuscles, and cholesterine. A large cystic sarcoma was suspected. The urine for twenty-four hours was forty-three ounces, sp. gr. 1020, and without deposit, and free from albumen and sugar. An incision four inches long was made over the tumor, and on opening the abdomen a dense white

capsule presented itself. The hand passed into the abdomen failed to find any intestine in front of the cyst, the limits of which, easily determined from the liver above, could not be defined in other directions, though the wide base evidently occupied the region of the kidney. A large trocar emptied seventy-two ounces of cocoa-like fluid with a slight urinous odor, and containing a large quantity of cholesterine. Subsequent examination showed .5 per cent. of urea. An incision was made through the dense wall of the cyst, which was fully one third of an inch thick, and the cyst edge was stitched to the abdominal wall, a glass drain being inserted. Before this was done another twenty ounces of fluid escaped, containing bits of dark-brown material, evidently old blood clots, and a layer of this material lined the inside of the cavity. For the first few days all went well, the cavity being irrigated twice a day—when suddenly the discharge became very putrid, the temperature was considerably elevated at night, the patient got much thinner, there were profuse sweatings, and the urine passed by the urethra diminished in quantity until it fell as low as sixteen ounces, with only .75 per cent. of urea. In a couple of months the temperature was normal, the urine rose to nearly thirty ounces, with increase in the amount of urea, whilst the discharge, which was less offensive, diminished considerably.

In five months from the operation, the patient left the hospital, with a sinus still discharging, but otherwise well. The urine was fifty to sixty ounces in twenty-four hours, sp. gr. 1014 to 1020, acid, no abnormal constituents. The patient is able to do his work and declines to have a nephrectomy performed. The explanation of the cyst is probably this: the injury referred to lacerated the kidney substance the split running into the pelvis, and as no blood was seen in the urine, the ureter was probably plugged with clot. Hemorrhage, with retained urine, distended the pelvis of the kidney, and in all probability caused atrophy of its substance to a considerable degree.

**Allis (Oscar H.) on Problems in Surgery.**—*Med. News*, July 25, 1891.

**Problem I.**—A man in fine health, thirty years of age, falls before a moving railroad train and has his arm crushed and severed from the body just below the shoulder.

Seen an hour after the accident, he has a fairly good pulse, is perfectly conscious, has "reacted" well, has a good moral and physical history. Shall the surgeon proceed to amputate? No. It is best to wash carefully the lacerated stump with warm bichloride solution, dress it with as much care as if amputated, and leave the man for at least twelve hours, and secure for him the best of all restoratives—sleep,—and even then do not amputate simply because he has had *time* to react. One of the blessings of modern surgical methods is that a lacerated stump can be kept uncontaminated for days, and the amputation suffer nothing by delay.

**Problem II.**—There is an injury to the foot of such a nature that a portion of the tarsus can be saved. Shall we select a Chopart or a Pirogoff? It is an axiom in surgery that when a limb is injured one should save all he can. Were I to lay down a rule I should base it on the function of the limb. The function of the upper extremity is prehension, hence a finger or half a finger may be of priceless value. The function of the lower extremities is locomotion, hence the operation should be adopted that will yield the best results. One maker of artificial legs that I consulted, alluding to Chopart's and Pirogoff's operations, said: "Amputation about the ankle always makes poor walkers." Another, referring to the same class of cases, said that in such cases he was able to fit limbs, but that the best walkers were those that had a few inches below the knee. Patients themselves confirm this view. The same criticism applies to amputation through the knee-joint. Leg-makers (and leg-wearers confirm their statement) say never amputate through the joint unless you saw off the condyles, but it is far better to amputate just above the condyles. Don't amputate through the joint; go above or below it.

**Problem III.**—Shall we use ligatures in our amputations? Acupressure had its brief hour of notoriety; torsion has shown itself to be safe, even upon the axillary and femoral arteries. But the ligature triumphs—not that of its immortal author, Ambroise Paré—large, clumsy, and septic, with one end sticking out of the wound, but the ligature of the finest, choicest, strongest sterilized silk or animal fibre, cut short, and allowed to remain. For the smaller vessels the hemostatic forceps suffices.



**Problem IV.**—A woman, seventy-five years old, has fallen and fractured the neck of the femur. What shall be the treatment? One will apply weights, demand absolute rest, reap a harvest of bed-sores, and an early death. Another, following the direction of Sir Astley Cooper, will disregard the fracture, treat the woman, get her out of bed in a week, if she will bear it, with a good, useful limb to reward him for his pains.

**Problem V.**—A child falls and injures its elbow; a fracture is discovered. The bone unites, but the forearm wastes; the fingers are contracted; there is every evidence of nerve lesion associated with the injury. Six months wear away; massage and electricity are employed without avail. What shall be done? I would cut down upon the nerve and excise the cicatrix, and measure the length of nerve removed. If the gap were considerable, say an inch, I would remove the same length of bone from the humerus, at a point some distance above, reunite the humerus, suture the nerve, and close the wound.

**Problem VI.**—Both bones of the leg are broken; the fibula unites, the tibia fails to unite. How shall we proceed? It is not a difficult matter to bring about union of the tibia by removing a section of the fibula, but the real difficulty lies in lengthening the tibia. I would suggest that the periosteum with sufficient superimposed connective tissue be dissected from the outer side of the upper fragment and the inner side of the lower, making a space which could be filled with bone chips, and perhaps the tibia could in this way be reproduced.

**Problem VII.**—The surgeon, in operating for the radical cure of hernia, cuts the vas deferens. Shall he suture the divided ends? The lumen of the spermatic canal is very small. Unless perfect approximation be secured, there must supervene a mechanical obstacle to its ever again acting as a duct.

**Problem VIII.**—A blow is struck or a wound inflicted upon the skull; a cerebral abscess forms; pus is found in the wound or upon trephining. What is the proper treatment? (In the ordinary phlegmonous abscess we note its maturing in a fortnight, its spontaneous rupture, and its rapid healing. There is a single joint in this that I want to notice, viz., the rapid, spontaneous

cure. This is due to its collapsing. The abscess forms in soft tissues that render collapse certain. Abscesses in bone cannot heal by a collapse of their walls, they always pursue a tedious course.) Can such an abscess heal by collapse of its walls? I would suggest the removal of a sufficient amount of the skull to permit the dura to fall in, with approximation of the abscess walls. In hydrocephalus we have an analogous condition. To aspirate ventricular fluid contained in a closed bony cavity is likely to do more harm than good. In hydrocephalus both ventricles are usually filled, there is symmetrical dilatation; there should be provision for symmetrical contraction, hence the plan of the removal of a portion of the vault of the skull, extending through both parietals. It is possible to remove the bone from the sinus, and not wound the latter. Then gentle, symmetrical compression, together with constitutional remedies, would hold out a prospect of return to normal conditions.

There is still another field in which the lesson from the collapse of an abscess suggests a remedy. I allude to pulmonary tuberculosis. It is not the nature of the disease which prevents tuberculosis from being self-limited in pulmonary tissue as it is in the head of the femur. The tuberculous joint can throw off the disease. In pulmonary tuberculosis the system makes a most desperate effort to accomplish the same end but fails. Nature gives us a hint as to the way in which we should proceed. Who that has made an autopsy in a case of advanced phthisis has found the pleura? What has become of it? Nature has glued its two surfaces together. The lung is fastened to the chest-wall. Nature puts forth all her energy to cause a collapse of the chest cage. She succeeds but in part. The sunken chest is an illustration of nature's mode of causing shrinkage of abscesses in order that she may effect a cure. Why not follow this hint and seek to give relief by the retraction that would follow a resection of the ribs? I would make the following suggestions:

(1) Make the resection as near the angle of the rib as possible, *i. e.*, in the lateral or postero-lateral aspect of the chest. The long part of the rib is now attached to the vertebral only through the sternum and the corresponding rib of the opposite side. It becomes a long lever, and can be most readily acted upon by atmospheric pressure.

(2) At least two inches, possibly three, of each rib should be resected. The periosteum should be removed with the bone, so that there should be no possibility of the bone being reproduced. A cicatricial fibrous band will form that will answer every purpose.

(3) At least four ribs should be resected. A resection of the fifth, sixth, seventh, and eighth ribs would remove much of the resistance of the thoracic walls, and point a very considerable degree of retraction. I would suggest the early stage of the disease as the best time for doing the operation.

**Rundle (Henry) on a Case of Axillary Aneurism** (*Brit. Med. Fr.*, Dec. 13, 1890).—The patient, fifty-two, married, tall, strong, and well developed, had a pulsating swelling extending from the right axillary space to the edge of the pectoral muscle, which measured  $7\frac{1}{2}$  inches laterally, and 7 inches from above downwards. The skin over it was glazed and discolored. There was considerable œdema and infiltration of the forearm and intense neuralgic pain with tingling of the fingers. The temperature of the arm was normal. A distinct *bruit* was heard over the tumor. The pupils were dilated and unequal, the right responded to light slowly, the left normally. Pulsation in the tumor was stopped by pressure on the subclavian. The patient was a laborer and had done much heavy work. He had contracted syphilis at twenty, and had been subject to winter cough for some years. The lungs were emphysematous. The subclavian was ligatured in the third part of its course.

There was but little venous hemorrhage, the external jugular being tied in two places, and cut between. After the carbolized catgut ligature had been applied no pulsation could be felt either in the aneurism or in the radial. The edges of the wound were sutured and the arm and right side of the cheek were wrapped in cotton-wool and flannel bandages. Two days after the wound was dressed, a few drops of pus were found, pulsation at wrist, no perceptible pulsation in tumor, stain over it less angry-looking. About three weeks later developed acute mania, and died on July 11th.

Post-mortem examination made nine hours after death showed: rigor mortis commencing, cadaveric lividity absent, right axillary space occupied by a rounded swelling which was seven inches from the centre of the clavicle to its centre, and four inches from the right nipple. The aneurism was found to involve about four inches of the length of the vessel. The general form of the sac, which was occupied by a firm coagulum, was nearly globular, and measured five inches laterally. A firm coagulum, about the size of an egg, fusiform in shape, occupied a portion of the artery between the point of ligature and the aneurism. There was some pus around the artery, and on the distal side of the point of ligature was a deposit of plastic matter, which seemed to have closed the coats of the vessel. The operation may be regarded as a successful one; the tumor was free from pulsation, consolidated, and much smaller.

## REPORT ON RHINOLOGY AND LARYNGOLOGY.

BY CHARLES H. KNIGHT, M.D.

**Saint-Hilaire on the Anæsthetic Effect of Antipyrin.**—The anæsthesia produced by antipyrin is complete and includes the sense of touch and perception of heat and cold.

Its duration is from one to two hours.

The strength of the solution should be not less than 30 per cent. With a solution of 10 to 20 per cent. no effect was observed.

This agent is expected to be of value in certain painful and reflex affections of the throat in which prolonged analgesia is desired, for example, ulcerative tubercular laryngitis. It will not take the place of

cocaine in cases, such as cauterizing operations, in which rapid and profound anæsthesia is necessary.—*Arch. Internat. de Laryngol.*, etc., No. 5, 1891.

**Demme in Ozæna.**—Atrophy is looked upon as a secondary stage of hypertrophic rhinitis resulting from compression of the bloodvessels. Simple atrophic rhinitis is not identical with ozæna, but the former is very apt to become transformed into the latter. The fetor of ozæna is due not to bacteria but to decomposition of retained secretion. The author believes in the existence of a special and characteristic

deformity of the nose, observed in certain families and hereditary, which predisposes to the development of ozæna. In the matter of treatment he prefers irrigations with warm water to any of the antiseptic solutions. Of the powders which liberate iodine he recommends aristol. His best results have been obtained with massage of the mucous membrane, using a probe armed with cotton coated with 20 per cent. ointment of pyoktanin in lanolin.—*Rev. de Laryngologie*, etc., Sept. 1, 1891.

(It is gratifying to notice that in the course of the discussion on the foregoing paper at the Berlin Laryngological Society Krakauer urged that the term "ozæna" be abolished, since it is merely the name of a symptom and has no anatomic-pathological basis. He prefers the denominations "simple atrophic rhinitis" and "fetid atrophic rhinitis.")

**Ruault on Ablation of Adenoid Tumors of the Pharynx.**—The author insists upon the importance of asepis as regards the field of operation, the instruments, the hands of the operator, and the wound itself. It is easy enough to secure the result as to instruments and hands. It is much more difficult to render the field of operation aseptic and to exclude noxious germs from the wound. The latter is accomplished by insufflating the nasal fossæ and the naso-pharynx three times a day with a powder of salol, or better aristol, for three or four days before the operation and for six or eight days after. The powder is preferred to solutions because it is easier of application, prolongs the aseptic condition, and involves less danger to the ears. The operative technique advocated by the author differs but little from that usually adopted. The patient is anæsthetized in the recumbent position with the head dependent so that blood and debris cannot get into the larynx. Great stress is laid upon the necessity of using the finger as a guide to the manipulation of the cutting forceps and for the purpose of exploration. It is important to remove all the abnormal tissue. In young children this is comparatively easy because most of the growth occupies the posterior wall of the naso-pharynx; after the eleventh year it is more difficult, the obliquity of the vomer having diminished and the growth showing a tendency to invade the posterior nares. The removal of the mass should be accomplished with the forceps; it cannot be

thoroughly done with the finger alone, and recurrence is much more probable if the latter method be chosen. Hemorrhage is generally abundant but does not require the use of hemostatics. At the end of the operation it is the custom of the author to rub into the wound a tampon of cotton soaked in iodine, 2 parts; iodide of potassium, 2 parts; distilled water, 8 parts. The patient is allowed to leave his bed the day after the operation and his room by the end of the week.

The post-operative accidents observed were severe secondary hemorrhage, twice; suppurating otitis media, once; secondary infectious amygdalitis, five times; and in about fifteen cases more or less constitutional disturbance. The majority of these accidents occurred in cases operated upon at several sittings, without an anæsthetic and before the author was in the habit of observing extraordinary antiseptic precautions. He therefore concludes that one is never authorized in any case in operating without following the most rigorous antiseptics before, during, and after intervention.—*Arch. Internat. de Laryngologie*, etc., No. 5, 1891.

**Wagner on the Relation of Adenoid Tumors of the Naso-pharynx to Chronic Suppurative Otitis Media.**—The author narrates seven cases which illustrate in a very striking way the good effect upon a chronic otorrhœa following removal of adenoids. His observations incline him to the opinion that middle-ear disease is relatively infrequent in subjects of voluminous adenoid hypertrophy, but in case of a coincidence of these affections the otitis offers much more obstinate resistance to treatment than in cases free from this complication. In chronic otitis, therefore, when one discovers an adenoid tumor of even moderate dimensions, removal of the growth should be proposed, the operation being harmless and in every case useful, and often highly successful after the failure of many other methods of treatment.—*Rev. de Laryngologie*, etc., Aug. 15, 1891.

**Cullen (Gilbert I.) on the Treatment of Hypertrophied Tonsils by Means of Ignipuncture.**—The main indications for reduction of tonsils by galvano-cautery might be summarized as follows:

I. When tonsils have ceased to perform their function by reason of interstitial

thickening and occlusion of the lacunæ of the glands, in which condition the mouths of the crypts becoming blocked with the accumulation of sebaceous matter, which rapidly decomposes, they form an excellent culture medium for various pathogenic germs which may ultimately be absorbed into the lymphatic system.

II. When a tonsil shows itself competent at short intervals to become inflamed and give rise to peritonsillar abscess.

III. Where the tonsil is so situated that it is a matter of great difficulty as well as a danger to use the tonsillotome, and from excessive adhesions of the pillars, likely to cause severe hemorrhage by their being cut.

IV. In all cases where the patient is of a hemorrhagic diathesis or in other cases in which alarming hemorrhage is feared.

V. Where patients will not consent to the use of the knife and yet the demand for the removal of the gland is imperative.

(At the meeting of the Am. Laryngolog. Ass'n in 1887, and again in 1889, papers were read by the reporter on the "Galvano-Cautery in Hypertrophied Tonsils." The following opinion was then expressed: "Galvano-cautery should be reserved for a comparatively small proportion of cases, including those in which the hemorrhagic diathesis is present or suspected, those in which vascular anomalies may be recognized, those in which anatomical conditions prevent a sufficiently complete excision of the organ, and those in which the use of a knife is positively declined." Continued experience has not modified that opinion, except perhaps in the direction of still further restricting the field of ignipuncture and similar electrical methods. They are undeniably painful and tedious, and, as stated in my second paper, the danger of hemorrhage after cutting seems to have been "unduly magnified.")—*Weekly Med. Review*, Aug. 8, 1891.

**Schaede on Hypertrophy of the Lingual Tonsil and its Treatment.**—The condition is often associated with hypertrophy of other segments of the lymphatic ring of the pharynx, and, what is more strange, sometimes with actual atrophy of these segments. Two forms are recognized—the circumscribed and the diffuse. They are easily seen with the laryngeal mirror, and the former might be mistaken for those small papillomata met with in this region. These neoplasms,

however, have a firmer consistence and tend to be pedunculated. The most prominent symptoms are roughness of the pharynx, constant desire to swallow and sometimes even retching, and a sensation of a foreign body which provokes cough. The sensations are generally referred by the patient to the larynx and not to the base of the tongue. It is necessary to explain their presence by supposing a special irritability on the part of the subject, simple impact of the mass upon the lingual face of the epiglottis not being sufficient cause for all the subjective symptoms complained of.

The treatment consists of applications of iodine, a futile method, destruction of the tissue with the galvano-cautery when it is flat and diffuse, the use of the cold wire snare when the tissue is soft, the galvano-caustic loop when it is more dense.—*Berl. klin. Wochenschr.*, No. 13, 1891.

**Newcomb (J. E.) on Pharyngeal Mycosis; Mycosis Leptothrica.**—A careful description of this common condition, which has doubtless been the source of numerous diagnostic errors. The points in differential diagnosis are enumerated, and the galvano-cautery is insisted upon as the best and most effective method of treatment.—*N. Y. Med. Record*, Aug. 29, 1891.

At a recent meeting of the Boston Soc. for Medical Improvement Dr. Cutler showed a specimen of mycosis of the pharynx and described its composition. Dr. F. I. Knight remarked upon the confusion in diagnosis and the advantages of the galvano-cautery, and referred to a recent German recommendation of cigarette smoking, nicotine applied locally having been observed to produce a good effect.—*Boston Med. and Surg. Jour.*, Aug. 20, 1891.

**Barling (Gilbert) on Lupus of the Mouth, Pharynx, and Larynx.**—Six cases are reported. All but one had external lesions, and that one afterwards developed them, at the time the mucous membranes were affected, and only two had symptoms pointing to implication of the interior surfaces. In all the cases injection of tuberculin had quite as pronounced effect on lupus of the palate, pharynx, and larynx as it had on the lupus of the skin, and the local reaction was similar to that occurring in laryngeal

tuberculosis, with somewhat less tendency to rapid necrosis. The remedial effect of the injections is equally marked in lupus of the mucous membranes and of the skin.—*Lancet*, London, June 27, 1891.

**Ottolengui (R.) on Mechanism Versus Surgery in the Treatment of Congenital Cleft Palate.**—The objects of this paper are to show that but a limited number of cases are susceptible of certain cure by surgical interference, that after failure of an operation the patient may be in worse plight than before, and that mechanical treatment, of which a full description is given, is capable of giving good results even in desperate cases. It is maintained that correction of faulty speech is the important thing and that improvement in deglutition is of minor consequence. The obvious difficulty with all operative methods is that although beautiful union may be secured the velum is too short to reach the posterior pharyngeal wall, and but little or no improvement in speech results. Moreover, the patient is apt to be in less favorable condition for the adjustment of an artificial palate. After the palate has been fitted, children have to be put through a very thorough course of training in articulation, but in most cases the results are entirely satisfactory.

(The author underestimates the importance of facilitating deglutition by surgical intervention. A striking example of the effect upon nutrition of the difficulty in mastication and swallowing due to cleft palate has occurred in the reporter's service at the Manhattan Eye and Ear Hospital within a few months. The patient was a poorly nourished girl of twelve years with a fissure involving the hard palate to only a slight extent. The age of the patient and the extreme thinness of the tissues led me not to expect complete union. The

uvula failed to unite and the stitches cut through anteriorly, leaving a small fistula. The improvement in speech has been slight, but noticeable. The change in the demeanor and general appearance of the patient has been remarkable. Her nutrition has improved and her whole aspect is that of a contented and happy child, whereas formerly she was moody and irritable, and was evidently suffering from malnutrition. The change may fairly be attributed to the increased ease with which the child takes her nourishment. The author mentions that division of a united cleft has been practised with advantage in a case in which the operation failed to give a satisfactory result as regards speech. If it be true that correction of speech is of paramount importance, and that the surgical result may be not only a failure, but a serious obstacle to the introduction of an artificial palate, there should surely be no hesitation in recommending reopening of the cleft. The mechanism devised by Dr. Kingsley and described in this paper is most ingenious and must certainly be an inestimable boon to a very large number of inoperable cases of cleft palate.)—*Brooklyn Med. Jour.*, Aug., 1891.

**Roe (John O.) on Tuberculous Manifestations in the Upper Air-Tract.**—This paper reviews the literature of the subject and the diagnostic features of the disease, and concludes with a description of the various methods of treatment. The author thinks highly of curettage and lactic acid in those cases to which it is adapted—that is, cases of primary laryngeal tuberculosis, or those in which extension of disease may be prevented by removal or destruction of the local deposit. The presence of inflammatory complications is a contra-indication to the use of this method.—*The Therap. Gaz.*, June 15, 1891.

## REPORT ON OPHTHALMOLOGY AND OTOTOLOGY.

BY A. T. MUZZY, M.D.

**Wolf (O.) on Removal of a Revolver Bullet from the Temporal Bone by the Use of the Chisel; Recovery with Preservation of Hearing.**—The case is published as an offset to another case reported in the *Archiv für Ohrenheilk.*,

(Bd. xxx., S. 165), the previous case proving fatal. All previously published cases of bullet-wound of the ear and tabulated by Schwartze (*Chir. Krankheit. des Ohres*, S. 358) lost the hearing, and nearly all proved fatal, the danger being purulent

erosion of the carotid; death may also ensue after years as a result of purulent meningitis. October 15, 1889 a young woman was struck by a bullet, discharged near by, in the right ear. Consciousness was lost, and hemorrhage was slight. After eight days facial paralysis developed. When seen fourteen days after the injury the course of the bullet was seen to have been from just in front of the tragus inwards and backwards, crossing the auditory canal and penetrating the posterior wall near the drum. The tympanum could not be made out for the laceration and swelling of the tissues. Nelaton's probe gave no indication of the bullet's situation. There was moderate facial paresis, no vertigo, headache, tinnitus, or vomiting. The watch was heard at 2 cm, and whispering near the ear. The indications were that the bullet would be found between the carotid, sinus, and the middle fossa, in the neighborhood of the Fallopian canal. Mindful of Schwartze's statistics, it was evident that, though a delicate place, there was more danger in waiting than in operating. The sixteenth day after the injury the auricle was separated posteriorly and turned forward, the periosteum of the bony wall loosened and the bone chiselled. The bone was very hard and the constant oozing of blood prevented a good inspection. After an hour and a half, and having chiselled  $1\frac{1}{2}$  cm without making out the bullet, further work was deferred for two days, hoping to secure a drier condition and clearer inspection. On resuming work inspection with illumination disclosed a shining metallic point at the bottom of the cavity previously chiselled, and which after difficult cutting around was finally removed very much misshapen by the dense bone. Careful examination showed that the bullet had rested directly upon the sinus. The subsequent course was favorable, and the facial paresis also disappeared.—*Arch. Otol.*, vol. xx., No. 3.

**Risley (S. D.) on Incipient Cataract; its Etiology, Treatment, and Prognosis.**—The object of the paper is to show the fallacy of the old-time advice to patients with incipient cataract that nothing could be done for them until ripening of the cataract had been accomplished.

The writer leaves out of consideration those cases of stationary opacities occurring in otherwise normal eyes, stating that never has he seen an established opacity of the

lens disappear. An opaque spicule once formed remains or increases. Where under treatment vision has improved, this was not from removal of the opacity from the fibres of the lens but from improved condition of the vitreous, retina, and choroid. Cataracts that are the closing scene of eyes lost from retinal detachment, inflammatory glaucoma, and irido-choroiditis are also omitted from consideration. Yet they are mentioned as pointing in an unmistakable manner to the possible relation existing between disease involving the nourishing membranes of the eye and the impaired nutrition of the lens. Chronic hyperæmia of the very vascular choroid, however produced, by increasing the contents of the globe, increases intra-ocular tension. In youth the readily yielding sclera results in increasing refraction and progressive myopia, but with the rigid sclera of middle and later life there result, according to rapidity, intensity, and chronicity, disturbances in the non-vascular structures of the eye—the vitreous, cornea, and lens,—changes that are recognized as the steamy cornea of glaucoma, hazy vitreous with web-like opacities of irido-choroiditis or cystitis, and the swollen opalescent lens with peripheral of spiculæ of opacity, and the steamy nucleus of incipient cataract. An analysis of eighty cases of incipient cataract gave the following results: In thirty-seven there was a good history of long-continued asthenopia, recurring styes, oleptheritis, etc. In fifty-eight cases errors of refraction existed in one or both eyes. Vitreous opacities, webs, etc., were noted in twenty-two and choroiditis in fifty-eight. Irritation of the conjunctiva, partial retention of the tears, swollen caruncles, and blennorrhœa of the lachrymal sac were observed in forty-five cases. The course of these eighty cases shows that, when the opacity of the lens had progressed so far as to prevent the use of the eyes at near work and to exclude the light the asthenopia and external inflammation gradually disappeared. The conclusion arrived at is that while opacity of the lens is a disease of advanced life it does not in all probability depend upon senile change, but is originated in local pathological states involving the nutrition of the eye itself. That hence it is amenable to treatment by such measures as are calculated to remove the choroidal disease upon which

it depends. If these deductions are true we are justifiable in giving a more hopeful prognosis to many persons who apply for treatment with incipient cataract. That if treatment fails to arrest the progressive degeneration of the lens, by virtue of the treatment adopted, the eye will be in better condition to submit to operative interference.—*Four. Am. Med. Asso.*, Aug. 29, 1891.

**Stephens (George T.) on Anomalies of the Ocular Muscles—An Examination of Von Graefe's Doctrine of "Antipathy to Single Vision."**

After some operations for squint it happened to v. Graefe that with apparent correctly adjusted axes double images existed, the visual powers of each eye remaining good, alternating squint previously existing, and the accommodation similar in the two eyes, yet single vision did not result. Use of prisms did not relieve the condition. Graefe's explanation being, first, injury of the nervous centres, or faulty projection from the retina, and, second, supposed difficulty of securing associated action between muscles long unaccustomed to association. The writer believes that while the technical details of disturbing elements may elude our search, yet that very generally the following principles will apply. *The antipathy to single vision as described by Graefe and by subsequent authors depends not upon lesion of the brain or faulty projection of the images from the retina, but upon unequal tension of corresponding ocular muscles under the influence of corresponding nerve impulses directed to them.* Not that no irregularity in projection from the retina can occur, nor that cerebral lesions may not induce incorrigible diplopia. But such cases will have other and more definite phenomena than simple diplopia to denote the central or ocular trouble. Leaving out cases of paresis, the causes of this supposed antipathy will be found mainly in two conditions. One is acquired as the result of squint operations. For unequal setting back of the insertion of corresponding muscles induces irregular responses to impulses directed to these muscles. As a consequence of this irregular and unequally balanced condition of opposing muscles, no harmonious adjustments can be made, and the more earnestly the patient strives to bring about associated action the more signally he fails. A second causative condition, and one that acts in

nearly all of these cases is a difference in relative tension of muscles acting in the vertical direction. The instinctive effort to bring images into the horizontal plane is very great, perhaps as great as that of uniting them. This second condition and the instinctive effort made to overcome it, may produce variable lateral squint—that is, a squint which at one time or period of life is converging and at another diverging. If in such cases the apparent condition is treated by section of the muscles corresponding, double vision of an intractable form is likely to result. In certain cases in which this intractable diplopia exists the patient has the extraordinary faculty of selecting at will which eye shall fix the object, and the diplopia becomes homonymous or crossed according as the one or the other eye is engaged in direct fixation. Homonymous diplopia from brain defect or retinal would remain homonymous under all circumstances just named. Investigation of the individual cases of this class is often surrounded by very great difficulties. The object aimed at in correcting the defect is re-establishing a degree of equilibrium between opposing muscles, first correcting the unequal tendency in the vertical direction. A precept of essential importance is this: *Every modification of the length of a lateral muscle by relaxation or by shortening which can in any degree affect the rotation of one eye, should in every case be accompanied by an exactly equivalent modification of the corresponding muscle of the other eye.*—*Arch. Ophthal.*, vol. xx., No. 3, 1891.

**Eaton (F. B.) on the Ill Effects of "Coquille" Glasses, viz., Minus Refraction Water-lines, Astigmatic Refraction.**—The glasses described are those having a watch-glass contour and much used for protecting the eyes, especially the tinted varieties. They are all doubtless made by moulding heated glass, though some of the better grades are claimed to be ground. Personal testing of thirteen pairs of poorer quality demonstrated four of these as —.25 D. spherical, seven as concavo-cylindric, and the remaining had one glass a concave sphere and the other a concave cylinder. In the cylindrics the axis varied greatly. And all had "water-lines." Examination of twenty pairs of better quality showed that eleven were concavo-spherical, three spherocylindrical, and six with one glass spherical and the

other cylindrical; the axis of the cylindrical glasses varied as in the cheaper varieties. Only a few imported coquilles were obtainable. These were wholly free from water-lines, but their minus refraction was stronger in the spherical, and equal in the cylindrical to the cheaper grades. None of the glasses averaged less than  $-.25$  D., and some amounted to  $-.75$  D. Flat smoked glasses have therefore the advantage save in price, except for a few myopic eyes.—*Am. Four. Ophthalmol.*, March, 1891.

**Swain (H. L.) on Vesicles in the External Auditory Meatus.**—This is a rare pathological condition. Dr. Gorham Bacon reports only five out of twenty-five hundred cases. And out of two thousand ear patients only three cases have come under the writer's notice up to the winter of 1889 and '90. During and subsequent to the presence of the influenza he has noted five more cases. They present themselves in two forms, the clear and colorless, and the bloody, called by some otitis externa hemorrhagica. Sometimes both forms appear in the same ear together. The last of the later five cases noted was associated with pemphigus. From the association of this condition so markedly with the influenza and with pemphigus, the conclusion seems natural that the same pathological condition underlies them.—*Arch. Otol.*, vol. xx., No. 3.

**Randall (A.) on Simple Tests of the Ocular Muscles.**—These tests were given by v. Graefe, intended more especially for the internal recti, but two of which are well calculated for use in other cases. The first was having the two eyes follow the movement of a finger as it was approached to the face in the middle line. It is a rough method of showing which of the interni is the weaker. The second was fixing the attention of one eye by an object held in the middle line a little below the horizontal plane and within reading distance, while the other eye, whose vision of this object is intercepted by a card, is watched for wandering movements. Graefe said nothing as to the size of this object. Greater accuracy will be gained by this efficient and simple test if the object be minute in size. This shows the balance between accommodation and convergence. Insist that the patients look at the object so that they see it clearly, and by making

quick movements of the covering card from one eye to the other you will obtain results of great practical value and reliability. The writer says that he does not think he has ever made out an insufficiency by other and subsequent means which were not revealed by this. Further, the test is a quantitative as well as a qualitative one, erring at most  $1^\circ$  from the result obtained by prisms. Roughly speaking, each millimetre of deviation in movement corresponds to  $2^\circ$  of insufficiency as measured by prisms. Should the eye jerk in its correcting movement the amount of this must be multiplied by the number of jerks. All observations in insufficiency should be often repeated to gain accuracy. The third test is that with vertical diplopia and prisms. Some make light of this test, yet it is the most reliable, and shows the *habitual* relation between accommodation and convergence. While the results of repeated observations may vary between themselves, they do no more than the relation itself, which is not a fixed one. Two points are worth noting as essential to the success of the first trial: The object used for fixation should be as small as can be clearly fixed by the eye. No vertical line should extend so as to give the two dots anything in common. If these two essentials in this test are observed, the writer believes cases of so-called latent insufficiency will prove to be much rarer than Dr. Noyes and Dr. E. G. Loring would lead us to believe. A device, employed by Dr. E. E. Maddox (*Four. Anat. and Physiol.*, xxi.) in this vertical diplopia test, is the use of an obtuse-angled prism, or in other words, a double prism with bases together. If the line marking the junction of the bases be placed so as to bisect the pupil, diplopia for that eye will be produced. The method of use is to cover one eye while before the other is placed the double prism, and when the two pictures of the object are in a vertical position, the cover is removed from the first eye, and its pictures of the object tinged by a colored glass before the eye. The position which this tinted picture holds to the upper and lower ones of the second eye reveals the relations of the two eyes with great exactness. One point that has impressed the writer is that insufficiency of convergence for the near is the rule among hypermetropes.—*Med. News*, Sept. 7, 1889.



MEDICINE AND PATHOLOGY.

**Crookshank on Actinomycosis.**—This has frequently been referred to as a new disease, but the various manifestations of it had been met with for more than half a century, though misunderstood and misnamed. From contemporary literature there could be no doubt that it was very prevalent in Scotland in 1827-39. Professor Crookshank described its various manifestations, and referred to its prevalence in Australia and the United States. In man, as in cattle, cases of actinomycosis had been met with and not recognized as such. By the researches of Israel and Ponjick in Germany, and the recognition of a case in man by Acland in this country, a new field of inquiry had been opened up. The disease was not new in man, but it had not been differentiated from the diseases which it simulated. In 1848 M. Louis met with a pulmonary affection supposed to be cancerous. Mr. Lebert found in the pus—and made a drawing of—the tufts of club-shaped elements with which we are now so familiar. Nearly two hundred cases in man had been described, and about 5 per cent. had occurred in this country. Professor Crookshank suggests that the resemblance of the disease to tuberculosis might explain the reports of a very high percentage of cases of tuberculosis in cattle, both in this country and the colonies. He thought the disease was rarely, if ever, the result of direct infection from cow to cow, or from cow to man. There was reason for believing that man and animals derived the disease from a common source, and a strong suspicion attached to cereals.—*Med. Record*, Sept. 19, 1891.

**Barr's (A. G.) Clinical Observations on the Cardiac Bruits of Chlorosis.**—The writer has examined 205 cases of chlorosis with reference to the presence or absence of cardiac bruits. He found them present in 115. Their locality was as follows :

A systolic bruit audible at base only	in 56
“ “ “ apex “	“ 13
“ “ “ base and apex	“ 24
“ “ “ base, apex, and back	“ 22

So that in 102 cases, a bruit, always systolic in time, was heard at the base, wherever else it might be heard, showing the great preponderance of basic bruits

over apical bruits pure and simple—a fact in accord with general experience.

The cases in which the systolic bruit was audible at the base, at the apex, and in the back are naturally those which will excite the most interest, and it is to them particularly that I intend, says the author, the few remarks which follow to apply.

It is now about three years ago that I became aware of the fact that in a certain proportion of cases of chlorosis a systolic murmur may be heard, not only at the base and apex, but also at the angle of the left scapula and in its immediate neighborhood ; and since then I have been careful to note the locality of all bruits heard in cases of that disease, with the result shown in the figures given above.

The bruits were in all cases clear and distinct, though usually of a soft, blowing character, and audible to the students frequenting the out-patient room, so that there could be no reasonable doubt attaching to the observations. But I am quite sure that now and again the anæmic murmur may be observed to come and go, so that at one time it may be audible and at another not so.

In the crush and hurry of the out-patient rooms it has been impossible, I am sorry to say, for me to record accurately the concomitant conditions of the heart, but there is no doubt that in the cases presenting a bruit audible at the base, the apex, and in the back, marked changes in the character of the impulse and in the locality of the apex-beat were almost always present, indicating dilatation of the ventricle or ventricles and an increased force of the cardiac contraction. So well marked and constant have these changes been, that I have found myself able, with tolerable certainty, to predict the bruits to be heard after placing the hand upon the præcordium.

Speaking from my own cases, the duration of the cardiac murmur of chlorosis is not long after the patient has been put under efficient treatment by iron. I should say that, as a rule, all murmurs have disappeared at the end of three weeks on the average. In the base, apex, and back cases, the order of their disappearance was the reverse of that named, the basic murmur being the last to depart. This seems to suggest what I have no doubt is the fact—that whatever the mechanical conditions

giving rise to the bruits may be, the basic bruit is the earliest and mildest result of them, the back bruit the latest and most serious.

In regard to the general conditions attendant upon bruits in chlorosis, I have found it impossible to predict with certainty any cardiac change that may be present from the intensity of the pallor, the duration of the amenorrhœa, or the obstinacy of the constipation—those cases in which the blood-change seemed greatest having sometimes no bruit at all, while those which had a minimum degree of pallor might present bruits audible at the base, apex, and back.

An apex murmur, systolic in time and conducted to the angle of the left scapula, has usually been held to be distinctive of mitral regurgitation; and further, by those who do not agree that mitral regurgitation may take place from functional or recoverable conditions of the mitral orifice and its valve, is also held to be distinctive of organic disease.

I need not produce evidence to show how strongly it is held that apical murmurs audible in the back always mean organic disease of the mitral valve. On the other hand, I am able to point to 22 cases, in 20 of which murmurs identical with those heard in undoubted cases of mitral disease disappeared under treatment in the course of two or three weeks.

In 2 of the 22 cases the mitral regurgitant murmur has not yet disappeared, and as the cases have now been under observation for seven and nine months respectively, there is great probability that permanent changes in the heart have taken place.

The chief point I have wished to make in this short paper is that bruits, indicating mitral regurgitation, occur in a considerable proportion of cases of chlorosis, and that in a small number of such cases the cardiac condition ends in permanent organic disease.—*Am. Four. Med. Sci.*, Oct., 1891.

**Jamieson (W. A.) on a Method of Accelerating Desquamation, and therefore of Shortening the Infective Period, in Scarlet-Fever.**—Some years ago, says the writer, I advocated that our efforts to limit the spread of scarlet-fever should be directed to systematic disinfection of the skin, prior to, during, and till the absolute completion of desquamation. For this purpose mild measures of disinfection,

repeated at frequent intervals throughout, are much more certain and satisfactory than stronger ones employed solely towards the close of the process of skinning, or just before permitting a return to free intercourse and association with all and sundry. Carbolic acid in the proportion of 3 per cent., in ointment or oil, constitutes the most reliable agent. With this, however, should be combined daily ablution with soap and warm water, so as to remove as rapidly and as completely as possible the dry epidermic particles as soon as these become loose, the carbolized oil or ointment being rubbed on the surface after it is dried. While this method affords the maximum of protection, it occurred to me that it might be possible safely to accelerate desquamation itself, so as to lessen the period during which infection is likely to take place. Various modes of attaining this end were tried in succession, and were rejected as unsatisfactory; but eventually a plan was discovered which is at once simple and effectual, and which so far has not been proved to have any disadvantages. The action of resorcin in causing the outer layers of the epidermis to separate without injury to the deeper ones is now well known, and has been made use of in the treatment of ichthyosis and of acne. Rubbed on as an ointment, it did not produce the desired effect in scarlet-fever. A resorcin soap, indeed, would have amply fulfilled the indications, but on inquiry it was found that there were chemical difficulties in the way of manufacturing such. When resorcin was incorporated with ordinary hard or soft soap, a molecular change took place in the drug. Its constituents broke up and formed new combinations. In fact, it was no longer a resorcin soap. But in process of time, by a simple procedure, Eichhoff succeeded in obtaining a stable resorcin soap. He found that when a soap was made chemically acid by the addition of salicylic acid, a moderate amount of resorcin quite sufficient for our purpose could be combined with it. A 3 per cent. resorcin salicylic superfatted soap is now prepared by Beiersdorf of Hamburg and by Muhlen of Cologne. When this soap is used to wash cases of scarlet-fever, warm water being always employed from the commencement to the close of desquamation, a notable diminution of the period occupied by "peeling" is observed.

From the consideration of a large number of unselected cases the conclusion has been arrived at that, while the commencement of desquamation may be as early as the fourth day of the disease, or may in exceptional instances be delayed as late even as the sixteenth, the average day on which it is first visible is the ninth. Again, I determined that from the onset of the disease till the completion of desquamation in sixty-two unselected cases the average was 55.5 days, no treatment having been employed to interfere with the natural process. But when washing with the resorcin salicylic soap was begun as soon as signs of desquamation could be noticed, or shortly before, the desquamation was entirely completed in 40.26 days. There is thus a gain, on the average, of more than a fortnight. In all cases it was found advantageous, after washing with the soap and drying the body, to smear on a small quantity of some bland oil, such as olive, almond, or purified whale oil. The nurses, too, found it necessary to protect their hands with india-rubber gloves, or to use a sponge carefully in washing the patients, else their palms became tender from a thinning of the epidermis.—*Lancet*, Sept. 12, 1891.

**Male (H. C.) on the Hyperpyrexia of Rheumatism.**—In a recent number of the *Practitioner* is a study of eighty-three cases of rheumatic hyperpyrexia reported during the twenty years ending in 1890. In fifty-five of these cases the temperature exceeded 106° F., running as high as 110.4°. In one series of cases, thirty-nine in number, all having as their maximum temperature 106° to 110°, thirty-four were treated by cold bathing, with fourteen recoveries. Of those having the more moderate pyrexia, with the maximum at 106° and 107°, eight out of eleven patients recovered under the cold-bathing treatment. All of those that were not bathed died. In the last ten years cases and recoveries have been reported from time to time in the journals, and no fewer than sixteen cases of temperatures ranging from 106° to 110° are on record. The number of recoveries was thirteen. The pack was used in eight of these, with two deaths; the bath was used in the other cases, with one death. It is not proposed from these figures to base a ratio of recoveries on a study of the reported cases alone, for it is probable that many unsuccessful cases have not been reported, while the majority of the successes

have without doubt been given to the journals. But these reported recoveries are a satisfactory witness that lives have been saved which under other conditions must certainly have been lost under the strain of extreme temperatures. The writer urges the importance of making a most careful record of the temperature in all cases of rheumatic fever, and of recognizing at once the earliest indications of approaching hyperpyrexia. So soon as the thermometer shows an undue rise, there should be no time wasted over the administration of drugs, but an attempt should be made at once to check this rise by the application of cold to the surface. The result of such treatment in a favorable case is most gratifying. The patient may seemingly be dying from excessive heat-production one hour, and in the next hour may be in comparative comfort, with prospects of a speedy recovery. One bathing has frequently seemed to turn the scale.—*N. Y. Med. Jour.*, Sept. 19, 1891.

**Leeman (T. A.) on a Case of Hydrophobia.**—The patient was a boy about a dozen years old and a sheep herder. While asleep one night in his tent he was bitten by a skunk through the upper lip. The animal held on till he was torn away. A "mad-stone" was applied and "stuck on" at intervals for twelve hours. On the 21st day after the accident he was taken sick. At the first visit of the physician he presented the following condition:

Increased respiration, temperature normal, pulse 54, bowels constipated, depression of spirits, general restlessness, mental agitation, constant vigilance, cephalalgia, chilly sensations, loss of appetite, with a sense of distress, referred to the epigastrium, nausea and some vomiting, laryngeal spasm excited by an effort to swallow water, though drank milk freely; the mere sight of water would produce spasm, and any attempt to swallow water would produce spasms that were extremely violent. Respiration arrested, the whole frame agitated, terror and distress depicted on the countenance, and water if taken was forcibly ejected from the mouth and nostrils. A current of air, bright light, reflection from a mirror or any polished surface, and any mental excitement would bring on convulsions. An abundant secretion of tenacious mucus from the fauces, an increased flow of saliva, with almost constant expuition, the pulse frequent, capillary congestion,

with clammy perspiration over the entire body, any current of air would bring on clonic convulsions; finally, a closed and fixed glottis with perfect inability to swallow. Between the paroxysms the boy was rational and talked freely, but had a peculiar glaring expression from the eyes all the time. All of the above symptoms increased with complete anorexia, entire absence of sleep, general restlessness, with hydrophobic convulsions, and death on the 24th day after inoculation.—*Texas Courier-Record*, Sept., 1891.

**Neve (E. T.) on the Morbid Anatomy of the Pancreas.**—After commenting on the fact that the pancreas is an almost untrodden field of research, the writer gives the results of a series of autopsies as follows:

The cases examined by me may be divided into two series. In the first, I examined the organ macroscopically as a routine practice, but only removed portions for histological investigation when morbid conditions were present or suspected. In the second series I dissected the pancreas to find the relations of the portal vein and ductus communis choledochus. I measured the organ in three diameters, registered its weight and naked-eye appearance, and finally examined sections of it microscopically. In the first series twenty-two cases were examined. In the second series I investigated sixty-five pancreases. I formed my standard of health chiefly from those fatal accident cases in which all other abdominal organs were healthy, and therefore *a priori* the pancreas also. For hardening purposes, a saturated solution of picric acid was found best. When the gland was very soft and diffuent, I found absolute alcohol necessary. The instances (in the second series) in which the pancreas was found apparently healthy were: (1) a case of œdema of the lungs, with uræmic symptoms before death; (2) cancer of uterus; (3) rupture of bladder; (4) cancer of the stomach; (5) rupture of bladder; (6) aortic aneurism; (7) rupture of spinal column; (8) general cirrhosis; (9) cancer of stomach and gangrene of lung; (10) peritonitis after operation for imperforate anus; (11) advanced chronic phthisis; (12) aortic aneurism; (13) bullet wounds of abdomen, peritonitis, etc.; (14) fatty heart. It is possible that some of the cases placed in the category of parenchymatous inflammation may have been healthy and only

altered *post mortem*. With regard to cirrhosis, too, it must be borne in mind that in an organ of such loose texture the amount of interstitial tissue is apt to vary greatly.

The question of post-mortem alterations in the pancreas required to be faced. I therefore made a series of experiments with four pancreases, keeping portions of them for twelve, twenty-four, and forty-eight hours, and exposing them for part of the time to a temperature of 100° F. I was able to satisfy myself, upon microscopic examination of these and comparison of them with portions of the same organs not treated in this manner, that progressive disintegration had gone on, the tubules having gradually broken up, and the cells having become disintegrated and being no longer definable. In some cases crystals of leucin were present. Whether these changes were due principally to digestion or decomposition it is difficult to say; probably both processes were concerned. In either case it tends to indicate that during the period which elapses after death, especially if the temperature has been above normal immediately before, the pancreas may undergo disintegrative changes. There is a danger of mistaking such changes for degenerative or inflammatory lesions of the parenchyma. In health the average size and weight of the pancreas, according to my observations, are: Length, 7½ in.; breadth, 1½ in.; thickness, ½ in.; weight, 3½ oz. The average transverse measurement of the follicles is 0.03 mm. The glandular cells measure 0.01 mm. to 0.0075 mm., and the nuclei 0.005 mm. to 0.00625 mm. In every case (of the second series) some of the microscopic sections were stained with hæmatoxylin, others were treated with methyl-anilin violet, and others with osmic-acid solution, with a special view to the more complete investigation of the waxy and fatty lesions.

Of the diseased conditions found, the writer makes the following division: 1st. Neoplastic formations. Six cases of tuberculosis were examined and in only one was tubercle tissue found. This was in miliary deposits on the surface. Giant cells were present, but no bacilli could be demonstrated. There was one case of sarcoma, one secondary lymph-sarcoma, one adenoma, and four carcinomata.

2d. Extra-glandular and interstitial changes. Seventeen presented more or

less fatty infiltration. In thirteen there was a cirrhotic condition of the interstitial fibrous tissue. In three there was more or less thickening of the walls of the ducts. Out of eight cases of waxy disease the spleen was affected in seven.

3d. Changes involving the glandular tissue. In two cases of typhoid-fever the pancreas was very soft and dark-colored, the cells large, cloudy, and granular.

Several other cases showed cloudy swelling of the gland cells. In all of these the patients had suffered from diseases in which the temperature had been elevated, and in most there had been acute septic affections. They were as follows: Ulcerative endocarditis, 2; pericarditis, 2; peritonitis, 2; septicæmiæ, 1; acute tuberculosis, 1; tubercular meningitis, 1; puerperal eclampsia, 1; acute alcoholism, 1; and gangrene of the lung, 1. The cells appeared swollen, cloudy, and granular. In some places their contour was irregular, and they seemed disintegrated. In many instances the tubules could hardly be defined, and the cells were heaped together. In other cases, especially those of peritonitis, the perivascular spaces were infiltrated with leucocytes.

*Amyloid Disease.*—In no case did the gland cells show the presence of waxy infiltration. In one instance (caries of the spine in a boy aged seven) the pancreas was unusually pale and firm, and presented a somewhat waxy appearance. But it gave no reaction with the iodine and methyl-anilin violet tests.

*Fatty Degeneration.*—This was by far the commonest disease of the pancreas. It was present in no less than 29 cases, or 1 in 3 of those examined. These were as follows: Diabetes, 2; cancer of stomach, 3; cancer of rectum, 1; cancer of mamma, 1; gangrene of lungs, 3; tuberculosis, 3; and 1 each of meningitis, lobar pneumonia, empyema, caries of spine, old-standing syphilis with intercurrent diphtheria, fracture of skull, shock, large inflammatory and cirrhotic kidneys, abscess of liver, hydatid of liver, acute yellow atrophy, endocarditis, heart disease with aortic vegetations, aneurism of aorta, old cerebral hemorrhage, and erysipelas. In all these cases the glandular cells were degenerated to a greater or less extent, and contained numberless minute fatty globules, which were very clearly demonstrated by the use of osmic-acid solution.

In fifteen instances well-marked fatty infiltration was also present. In four there was cirrhosis, and in three the capillaries were affected with amyloid disease.—*Lancet*, Sept. 19, 1891.

**Red (S. C.) on Abdominal Cystic Tumor Following Pneumonia.**—P. T., aged twenty-eight, during winter of 1889, suffered with double pneumonia. After subsidence of the lung trouble, he began to present an enlarged abdomen. The case was diagnosed ascites, of pulmonary origin.

The abdominal enlargement disappeared in a couple of months, allowing the man to return to work. One year after above he returned to be treated for the old trouble—enlarged abdomen. This time the enlargement was so great as to lead to tapping. The fluid obtained by the above procedure previously performed was nothing but the normal lymphatic fluid.

The case went from bad to worse, and finally died.

At the post-mortem examination a complete abdominal cyst was found, formed in the omentum, and containing six quarts of lymphatic fluid. Minute accessory cysts, containing same fluid, were found in the peritoneum adjoining the main cyst. This tumor possessed a complete cyst wall, formed in the omentum, extending down into the pelvic cavity.—*Coll. and Clin. Rec.*, Sept., 1891.

**Johnston (W.). Notes on the Bacteriological Study of Diphtheria.**—The writer admits the claims of the Klebs-Loeffler bacillus to be considered as the specific germ of the disease. The main characteristics of this organism are:

1. Rapid growth in serum at blood temperature leading to the formation of well-characterized colonies in sixteen to twenty-four hours.

2. Peculiarities of structure, especially the presence of involution, bacillus forms having clubbed or swollen ends, with granular, unevenly stained protoplasm.

3. Toxic effects, producing pseudo-membranous inflammations, followed by characteristic paresis, in cats and rabbits, and uniformly killing guinea-pigs in two to five days when injected subcutaneously, with production of necrosis, surrounded by local inflammations and oedema at the site of inoculation, and usually associated with more or less marked parenchymatous degenerations and areas of cell-necrosis of

the viscera. This condition is distinguished from other forms of experimental septicæmia by the fact that bacteria are absent from the blood and viscera.

The results of his examinations are as follows :

Of nine cases examined in which the diagnosis of diphtheria could be made without much difficulty from the symptoms and the appearance of the throat, the Klebs-Loeffler bacillus was found in eight. In the case where it was not found, the condition was one of an undoubted false membrane which contained, microscopically, large numbers of bacilli which appeared to be the organisms in question, but did not appear in the cultures. When the specimen was taken the throat had just been freely sprayed with a solution of hydrogen peroxide, and the negative result may have been due to its disinfectant power of inhibiting the growth, though the fact that colonies of staphylococcus aureus appeared make that less likely. There was an anomalous course in this case, since the throat was found perfectly clear of membrane on the following day, preventing my repeating the experiment. In spite of this the disease appears to have been true diphtheria, as the nurse stated that the patient had a distinctly nasal voice when he left the hospital, ten days later. The bacillus was also found in an anomalous case where an extensive false membrane existed with almost no disturbance of the general health. In this case there was no paralysis.

In six cases where the diagnosis was doubtful, the bacilli were not found. Several cases of follicular tonsillitis and a case of scarlatinal sore-throat were examined with negative results.

In conclusion, it may be stated :

1. That in almost all cases where strong clinical grounds exist for the diagnosis of diphtheria, the bacteriological examination has shown the almost invariable presence of the malignant Loeffler bacillus.

2. That, excepting in connection with scarlatina, measles, or erysipelas, the number of cases of diphtheritic sore-throat due to other causes is very small.

3. That in doubtful cases the accuracy of the method depends chiefly upon obtaining suitable material at an early stage of the disease.

4. That the method is not of much service in doubtful cases where the difficulty is due to the infection occurring in

localities difficult to examine without skilled manipulation, unless suitable material is obtained for examination.—*Montreal Med. Jour.*, Sept., 1891.

**Cause and Prevention of Diphtheria.**—The American Public Health Association at its meeting in 1890 considered the report on this topic, which was based upon answers received from various physicians in the States and in Canada. All but seven per cent. of the physicians consulted believed in the dependence of the disease upon a specific cause.

In answer to the interrogatory : *By what media and channels does the specific cause gain entrance to the human organism?* the opinions were nearly all favorable to, media : air, food, and water, and channels : air passages, mouth, inoculation.

The answer to this question establishes that the prevalent opinion among observers is, that the nose and throat are the parts upon which the virus usually finds a lodgment.

Occasionally cases are produced by inoculation either upon the skin, where it is abraded, or upon the membranes of the mouth. A large per cent. believe the virus is conveyed by the air, by food, and by drinking-water, but may be conveyed on the fingers, on spoons, knives, etc., used about the sick.

A large majority refused to believe that the disease could be caused by germs, ptomaines, or conditions and products developed within the body and independent of specific causes received from without. Nearly sixty per cent. believed that domestic animals and fowls were subject to the disease and that they infect human beings.

Concerning the most reliable disinfectant the census of answers showed the following preferences :

SUBSTANCES.	METHODS.
Sulphur .....	(by fumigation) ..48 per cent.
Mercuric bichloride ..	(solution) .....
Heat .....	(steam, hot-air, boiling) .....
Carbolic acid .....	(solution—spray) 16 per cent.
Free ventilation .....	(pure air) .....
No substances or methods reliable .....	5 per cent.

*Canadian Pract.*, Sept.

**Prentiss (D. W.) on Sequel to a Case of Slow Pulse.**—At the recent meeting of the Congress of American Physicians in Washington the writer presented some further details concerning a case previously reported to the association under

the title of "Case of Remarkably Slow Pulse." The patient was brought before the meeting on two successive years—1889 and 1890. From May 24, to July 2, 1890, the symptoms continued as previously mentioned. The pulse ranged from 13 to 21 per minute, with frequent spells of syncope; toward the last almost constant delirium, and for the last few days he wandered restlessly about the house in constant fear of being shot. July 4, 1890: More delirious and restless than usual; thought several parties were trying to kill him. Screamed with terror, "Murder! fire!" etc., until the neighborhood was alarmed. Finally was induced to lie down on the bed. His wife left him for a few minutes, and on returning found him dead. When the pulse was the lowest, these attacks of syncope would be worse. He had no apparent disease of the heart or of the other organs. It was functional slow pulse, and was a very unusual case. He thought there were very few such cases on record until he went to the library, where he found, to his surprise, ninety-three cases under that heading, and many under other headings.—*N. Y. Med. Rec.*, Oct. 3d.

**Edes (R. T.) on Autopsy in a Case of Slow Pulse.**—The results were reported at the same meeting. The sympathetic and vagus nerves on both sides, and the cardiac plexus, were examined with negative results, except that on the left side where the recurrent laryngeal turns round the aorta and gives off cardiac branches there were some slight fusiform enlargements. The microscopic examination of the nerves and of the medulla oblongata will be given. The heart itself was slightly enlarged, but not fatty or dilated.—*N. Y. Med. Rec.*, Oct. 3d.

**Smith (A. J.) on a Case of Exaggerated Hysteria Ending in Death.**—The patient, a young woman, L. M., somewhat less than twenty years of age, had from time to time complained of pricking sensations in different parts of her body, usually on the left side, and had, on several occasions, had pins and needles, entire or in fragments, escape from the superficial tissues through suppuration. At this time her physicians, recognizing the presence of similar foreign bodies in the left hand, removed three or four, and since then have from time to time ablated from the hand, and fleshy parts generally, usually on the left side, several dozen needles or pins,

entire or in pieces. The young woman strenuously denied all knowledge of their mode of entrance into her tissues, although she acknowledged that she had swallowed several pins and needles, which she was accustomed often to hold in her mouth while practising her occupation as a dressmaker.

Several years after the above-noted occurrence, she complained of certain indefinite pains, and developed cardiac murmurs, of the exact character of which the writer's informant is, unfortunately, at this date ignorant. The attack was diagnosed, however, at the time, as rheumatic in its nature, with secondary cardiac complications. The girl apparently recovered, and continued in seemingly good health for some time; but suddenly, five years ago, while in church, she developed an excessive rapidity of respiration, often as high as seventy-five to the minute (!) which persisted until her death on the 6th of June, 1891, except when she was asleep, when a normal respiratory rate always prevailed. From the development of this phenomenon, the young woman's robust health gradually failed, although she lost but little weight, and remained throughout in a fair state of nutrition. She gradually lost strength, however, became pronouncedly anæmic, and the presence of a small amount of albumen in the urine led to the belief that she was afflicted with Bright's disease, and, later, that her death was due to the same cause. At the autopsy, however, held the day following death, the kidneys and all other abdominal and pelvic organs were found normal. In making the primary incision, a pin was found beneath the skin over the lower portion of the manubrium; and in dissecting back the tissues, under the left breast toward the axillary side, were found half a dozen pieces of pins and needles. In opening the thorax the right pleura and right lung were found normal. The pericardium was adherent throughout its visceral and parietal surfaces, and could not be separated except by dissection. The parietal pericardium was firmly adherent to the pleura of the left lung by dense fibrous bands. In the pericardial tissue were found three or four needles firmly embedded. The heart was of normal size, and no valvular lesions were present. The left pleural sac was entirely obliterated by adhesion formation, and was opened only by protracted dissection. In this tissue, rendering the necessity for the use of a

knife doubly imperative, were found as many as thirty or forty pins and needles, entire or in pieces.

The mode of entrance, particularly when it is recalled that almost all of these bodies were found in the left side in a right-handed person, can scarcely be questioned, in spite of the eager denials on the part of the patient during life as to any personal knowledge.—*University Med. Mag.*, Sept.

**Griffiths (J. P.) and Burr (C. W.), Contribution to the Pathology of Pernicious Anæmia.**—At the recent Congress in Washington a paper was read with this title. The subject of the causes and nature of the various forms of anæmia were most obscure, yet some system of classification was necessary for the purpose of study. The authors proposed a provisional definition of anæmia, and a classification of the various forms proposed; reference was made to the published instances appearing to prove the close relationship between various forms of anæmia.

In spite of these seeming objections to the existence of distinct forms, it is probable that some, at least, are entirely distinct; particularly that chlorosis and pernicious anæmia are to be sharply separated. The various theories of the pathology of pernicious anæmia were referred to, and details were given of their own observations upon the presence of iron in the liver, 1st, in several cases of pernicious anæmia; 2d, in various other diseases; 3d, in the case of several animals experimented upon by producing anæmia in different ways.

The following were the conclusions of the authors, based upon their studies up to June of the present year: Pernicious anæmia is a form of hæmolysis, and therefore a non-cytogenic anæmia. In one light the disease, broadly considered, need not be a unity. Thus, a very similar condition can be produced in dogs by the administration of certain chemical substances. Further, patients with bothryocephalus latus, or with atrophy of the gastric mucous membrane, may exhibit symptoms of pernicious anæmia. All these might be considered pernicious anæmia in a broad sense. The same is true of certain cases in which the lavage of the stomach has been followed by the relief of the symptoms of pernicious anæmia. The disease is not, however, to be looked upon as not a unity, or as a symptomatic condition following other

diseased states. Tape-worm, putrefaction of the gastric contents, etc., may exist without the symptoms of pernicious anæmia developing.

Pernicious anæmia is rather a distinct affection, which may arise independently, but which may be superadded to chlorosis or any anæmic or other affection. Other anæmias resembling it, but due to any such cause as tape-worm or gastric atrophy, are rather to be considered as other forms of hæmolytic anæmia.

Pernicious anæmia may, then, be defined as an extreme and increasing anæmia, without marked loss of flesh, secondary to no known anatomical lesion, but due to the entrance into the blood of some certain hæmolytic agent whose origin is unknown, but which may be of the nature of a ptomaine.—*N. Y. Med. Record*, Oct. 3d.

**A New Appliance for Medical Examination.**—The age is certainly a progressive one in all respects, and we must take this as the excuse for the somewhat transcendental suggestion which has been made by a Russian surgeon, namely, that of examining patients in a plunge bath, on account of the facility which it affords for examining the abdominal organs. The advantages claimed for it are respectively the relaxation of the abdominal muscles; the ease with which the patient can assume various postures; the lessened amount of pain on pressure. The author has found his plan serviceable in diagnosing movable kidney, enlarged spleen, neoplasms in the the abdominal cavity, and other abdominal affections. No doubt the method possesses the advantages which are claimed for it, but the difficulty which appears to us to render its general adoption unlikely is that of finding a plunge bath handy precisely at the time that it is wanted. Moreover, we question whether private patients would quite appreciate the ordeal to which a morning visit to a distinguished surgeon would subject them, if part of it consisted in stripping and going into a plunge bath without previous notice. We can quite imagine that, for example, ladies would emphatically object, while the mere suggestion of such a thing to some sensitive minds might be taken as a gentle indication that the distinguished consultant really considered the application of soap and water necessary before he could proceed to an examination. Again, should the method ever command general ap-



proval, a well-fitted bath-room, designed and decorated after the newest styles, would inevitably become a *sine quâ non* among the requirements of a consultant's practice, and in London houses where could accommodation for such an appliance be found? We do not see any reason for questioning the value of physical examination under water, but we do not clearly see how the method could be practically applied. — *London Med. Press*, Sept. 16, 1891.

**Grant (W. F.) on Congenital Hepatization of the Lungs.**—A poor woman in my neighborhood was rather suddenly delivered of a child, and was attended to by a friend who tied and cut the cord pending the arrival of the midwife. The latter washed and dressed the infant about an hour after its birth. It died ten hours later, and was seen by me within two or three hours of its death. The friends asserted that the midwife had bandaged the child too tightly, and they ascribed its death to this cause. The child was an apparently healthy and well-nourished boy. There was some lividity of the lips, but no other appearances suggesting asphyxia or convulsions. There were no bruises or signs of injury. It was impossible that the child could have been overlaid, as death took place in the afternoon, and the mother was about to give it a tea-spoonful of gruel when she noticed it breathing its last.

A post-mortem examination was allowed. I found marked venous congestion of the cerebral membranes, the longitudinal sinus especially being full of dark fluid blood. On opening the cavity of the chest the thymus was seen to be of a light red color, and well developed; the heart was fully exposed to view, the lungs were of a dark red, and lying well back in the cavity of the thorax. The auricles were full of dark fluid blood; the ventricles were contracted and empty, the surface vessels being distended. Both lungs floated in water, the left just below the surface, and the right at a lower level. On examining the lobes separately it was found that the two lower lobes of the right lung were hepatized and sank in water, as also a section from the lower lobe of the left lung. The other organs were apparently in a healthy condition. It was clear that tight bandaging could not have had anything to do with the child's death. Theoretically, I sup-

pose, such a cause is possible, but I have been unable to find any record of such a case. — *Lancet*, Sept. 19, 1891.

**Crandall (R. P.) on Notes on Five Cases of Beri-Beri.**—The cases were from a Brazilian vessel at anchor in N. Y. harbor, and were received into the U. S. Naval Hospital. It was stated that no evidence of the disease was present when the vessel left a warmer climate, though it was probably latent. It was thought the intense cold (December) to which the men were unaccustomed was the cause of development.

The cases so nearly resembled each other that they may be studied in one group. On admission, the most marked symptoms were dyspnoea and stiffness about the lower extremities. The pulse-rate ranged from 80 to 110. The temperature averaged 99° F., and respirations 30. There was entire absence of pulmonary involvement. The increased respiratory rate and dyspnoea were attributed to fluid in the pericardium, the area of cardiac dulness being increased. Irritable stomach was observed in each case. In two only did œdema of the feet develop. Examination of the blood revealed a diminution of the red blood corpuscles without increase of the white. In two cases the stiffness and anæsthesia of the lower extremities was very marked, amounting to almost a complete paralysis. Improvement under treatment was very rapid. Treatment consisted in small doses of arsenic, hydrarg. chlor. corros., massage, and galvanism. In one case very strong currents were necessary to produce movements in the thigh muscles, but daily applications soon restored them to their normal tone. The cases completely recovered, and have been sent back to Brazil. — *N. Y. Med. Record*, Oct. 10, 1891.

**Roosevelt (J. W.) on the Frequency of the Localization of Phthisis Pulmonalis in the Upper Lobes.**—The facts may be summed up as follows:

1. The tubercle bacillus is found far more frequently in the upper than in the lower lobes of the lungs.

2. The pneumococcus, while it does not so often as the tubercle bacillus lodge in a particular part of the lung, nevertheless in about four fifths of all cases of pneumonia the lower lobe of the left lung or the lower or middle lobe of the right is the seat of the disease.

3. Inhaled dust does not usually lodge first in the part of the lungs where the tubercle bacillus is found.

4. It is impossible to drive any fine powder into the air vesicles after the lungs have been removed from the body, positive pressure being employed.

5. The tubercular process involves the walls of the vesicles before the bronchi are affected, at least in a vast majority of cases.

6. Neither liquids nor solids in the bronchi are more often found in the upper than in the lower lungs. In bronchitis, acute or chronic, the secretion is found in the bronchial tubes proper, and not in the air vesicles, and it is no more abundant in one lobe than in the others. In cases of hæmoptysis the blood rarely finds its way into the vesicles, and the particular set of tubes which contain the greatest amount of it is determined by the original seat of hemorrhage, the quantity of blood, the rapidity and duration of its flow, and the position of the patient. When the hemorrhage is so profuse as to expel most of the air from the larger tubes, as is the case when, for example, an aneurism of the aorta ruptures into the trachea, or a large branch of the pulmonary artery is the source of the hemorrhage, the blood fills the vesicles, but this occurs as a result not of the movements of respiration, but of the pressure of the effused blood propelled by the heart. This has no bearing upon the subject under discussion.

7. There is no evidence that the movements of the thorax affect any part of the lungs more or less in proportion to its bulk than any other part.

8. Among civilized people there is a marked difference between the sexes in the type of breathing. Women do not suffer from consumption quite so frequently as men; but consumption in women begins at the apices in about as many cases of consumptive women as it does in consumptive men.

9. The pulmonary artery and its main branches describe curves whose convexity is directed upward. The blood-vessels supplying the upper lobes are given off from the convex surface of the main trunks.

10. Small particles immersed in rapidly moving fluid, when passing through curved tubes, are thrown against the outer wall of the tubes if the specific gravity of the par-

ticles is greater than that of the fluid. In the pulmonary arteries small emboli of greater specific gravity than the blood would tend to run along the upper side of the main branches and enter the trunks which supply the apices. If the particles are extremely small, or if they are large enough to occupy a considerable part of the calibre of the tube, this tendency is not so marked as it is in the case of particles whose size is sufficiently great for them to attain a momentum capable of overcoming the friction which the surrounding fluid exercises upon them, yet not great enough for them to be affected by the direct force of the current.

11. The contents of the lymphatics enter the venous blood through the thoracic ducts.

12. Tubercle bacilli can, and often do, pass through lymph nodes.

13. Cheesy matter is heavier than blood serum.

The following statements are probably correct, but are not proved :

1. Tubercle seems to begin at the points where the pulmonary arterioles give rise to the capillary network.

2. Small masses of tubercle bacilli seem to have a greater specific gravity than blood serum. (Such masses grown upon beef-peptone-agar were found by the writer to sink in a solution of common salt after the agar had been thoroughly washed off. The experiments were too few in number to be regarded as conclusive.)

The foregoing statements make it probable that the infectious material producing consumption enters the system and is conveyed to the apices of the lungs, not by direct inhalation through the bronchi into the air-vesicles, but that it is absorbed by the lymphatics or blood-vessels, and, passing through the vena cava and right heart, it is swept along the upper wall of the right or left pulmonary artery and, entering the branches which supply the corresponding apex, is arrested by the capillary network. It is probable that the virus is introduced much more frequently through the lymphatics than through the blood-vessels. There is abundant evidence to show that the mucous membrane of the mouth, nose, and pharynx permits absorption of the bacilli through its lymph channels. The fact that lymph nodes do not, in other parts of the body, completely prevent the bacteria from passing makes it

extremely probable that the lymphatics of the stomach and intestines also permit them to pass. The mucous membrane of the trachea and larger bronchi may very possibly become infected, but it is through their lymphatics that the bacilli are introduced, and follow the same course through the thoracic ducts, right heart, and pulmonary artery as bacilli do when absorbed through other mucous membranes.—*N. Y. Med. Jour.*, Oct. 3, 1891.

#### The Prevention of Sea-Sickness.—

A curious notion seems to be common that the stomach should be kept as full as possible. Thus have we seen stout old men and women take with praiseworthy persistence—had the result been satisfactory—biscuits, brandy and soda, apples, a pint of porter, a red herring, and various other edibles and potables, with an entire want of success in retaining them—a course of procedure peculiarly trying to those who happen to be standing or rather lying on the verge of the act of vomiting. Were we to counsel those who are liable to this affection,

we should recommend as follows: Take a moderate meal two hours before going on board. Remain on deck amidships, well protected against cold, as long as possible. As soon as the premonitory symptoms appear, retire to the berth, undress as quickly as possible, and lie flat on the back for the first twelve or even twenty-four hours without food. Then take a small portion of dry bread and roast beef without fluid; this the stomach will probably retain. If there is much movement of the vessel, lie quiet again, or even go upon deck, and in the course of thirty-six or forty-eight hours the system will have recovered itself, and no further trouble will be experienced. It is a mistake to introduce a quantity of fluid, even of strong coffee, into the flaccid stomach, but if sickness persist a glass of champagne will probably prove serviceable. In some few persons quinine or antipyrin, chloral or potassium bromide, may act well; but as a rule medicine of all kinds should be eschewed by those who do not wish to aggravate what is already hard to bear.—*Lancet*, Sept. 19, 1891.

## BOOK NOTICES.

**The International Medical Annual.** Ninth volume, 1891. New York: E. B. Treat. 8vo., pp. 580. (\$2.75.)

This publication has been so long before the medical public that it is hardly necessary for us to detail its contents. Suffice it to say that they are up to those of previous years. The majority of the contributors are English, while America, France, and India are also represented. An effort, and a successful one, has been made in the publication to strike the happy medium between the desire of the specialist for detail and of the practitioner for a handy work of reference. Several articles are given on topics which have outgrown the limits usually assigned them in text-books. Among such articles may be mentioned "The Hand as a Diagnostic Feature in Diseases of the Nervous System," by Dr. E. L. Fox; "Methods of Testing for Errors of Refraction," by Mr. William Lang; "Recent Tests for Deafness," by Dr. J. Dundas Grant; "The Sputa as a Means of Diagnosis," by Dr. F. J. Wethered; "The Motor Centres of the Brain," by Mr. W. H. Elam; "The Diagnosis of Functional and Organic Diseases of the Heart," by Drs. Leaming and Jackson, of New York; and "The Diagnosis of Gastric Neurasthenia," by Dr. Dujardin-Beaumetz, of Paris.

A serious loss has been sustained in the force of editors by the death of Mr. Hugh Owen Thomas.

While the publication looks at matters from an English point of view, it is nevertheless broad in its scope and an excellent review of medical progress of the past year.

**Twelve Lectures on the Structure of the Central Nervous System for Physicians and Students.** By Dr. Ludwig Edinger, Frankfurt-on-the-Main. Second revised edition, with 133 illustrations. Translated by Willis Hall Vittum, M.D., St. Paul, Minn. Edited by C. Eugene Riggs, A.M., M.D., Professor of Mental and Nervous Diseases, University of Minnesota. 8vo., pp. 230. F. A. Davis, Philadelphia and London, 1890.

The book consists of lectures delivered to practising physicians, lectures intended to set forth the finer structure of the brain.

The historical features of the first chapter are concise and extremely interesting, as is the summary of the methods of investigating the central nervous system.

The subsequent chapters on structure are made much clearer by the frequent introduction of facts in comparative anatomy and embryology.

The text is free from that extreme technicality which, in some books on this subject, bewilders and yet it is eminently scientific.

The illustrations are abundant—there can hardly be too many in anatomical works—and are of good average quality. The frequency of more or less diagrammatic illustrations is not to be deplored, as in complicated structures like the central nervous system it is impossible to demonstrate important structures by means of illustrations showing *all* details.

As a companion volume to the really good books in the English language we already have, the work under consideration is indispensable to a physician's library.

**Diabetes: its Causes, Symptoms, and Treatment.** By Charles W. Purdy, M.D. 12mo, pp. 184. F. A. Davis, Philadelphia and London, 1890.

The object of this volume, according to the author, is "to furnish the physician and student with the present status of our knowledge on the subject of diabetes in such practical and concise form as shall best meet the daily requirements of practice, as they seem to me from a careful study and recorded observation of the disease extending over a period of twenty-one years."

It is a pleasure to note that under "Treatment" the author gives the first place to opium, mentioning only to deprecate the use of the newer and mostly patented nervous sedatives. His favorite method is to give a single sufficient dose of opium or some of its derivatives at bedtime.

The author gives due prominence to a protracted and rigid diet.

**The Neuroses of the Genito-Urinary System in the Male, with Sterility and Impotence.** By R. Ultzmann, M.D. Translated by Gardner W. Allen, M.D. 12mo, pp. 160. F. A. Davis, Philadelphia and London, 1889.

This little book consists of a translation of two monographs "On Neuroses of the Male Genito-Urinary Organs," and "On the Power of Generating and Copulating," and is an exposition of the pretty well-known ideas of the author on nature and treatment of genito-urinary diseases.

**Epilepsy: Its Pathology and Treatment.** By Hobart Amory Hare, M.D., B.Sc. 12mo, pp. 228. F. A. Davis, Philadelphia and London, 1890.

This work consists of an essay to which was awarded a prize of 4,000 francs by the Académie Royal de Médecine de Belgique, December 31, 1889. The chief interest in the study of epilepsy is its treatment, and we live in hopes that some moderately successful remedy will be found. In this present essay nothing new is introduced in the chapter on treatment, but much that is antiquated and useless is left out. In short, the author gives deserved prominence to the bromide treatment, not hiding its shortcomings nor exaggerating its benefits. It does not seem as though the author gave enough credit to chloral hydrate as a palliative and occasionally curative measure in epilepsy, while his expressed fear that it is too potent a poison to trust an epileptic with would hold good with almost any remedy, and falls to the ground when we

remember that an epileptic in the state he pictures is unfit to be his own nurse. In general his ideas on treatment are good, while the historical and pathological part of the essay are excellent.

**Annual of the Universal Medical Sciences.**

Edited by Charles E. Sajous, M.D. 5 vols., 8vo. \$15 per set. Philadelphia, F. A. Davis, 1891.

The issue of this stupendous work for the year 1891 completes the fourth year of publication. It does not greatly differ in its general appearance from its predecessors. With them, the majority of physicians who pretend to keep up with medical progress are well acquainted. In the present issue a reference-list has been added to each volume, which greatly increases its working value. Heretofore such reference-lists have been confined to the last volume, thus rendering it necessary to refer to it while using the others. We have always regarded this publication as most creditable alike to American medicine and to those engaged in its preparation. Every important discovery in each department is here chronicled in regard to all of its essentials, while the copious reference-lists are reliable guides to those who wish to go over the literature for themselves.

The literature of medicine has become so vast that no one man can keep track of all of it. Even the special workers with their narrowed field have difficulty in so doing. It is therefore perfectly allowable, and even commendable, to make use of every labor-saving device. Such a device the "Universal Annual" is. It covers the ground most thoroughly, yet its contents are not mere abstracts but discussions of what has been done in the broad field of the world. All literature has been brought under contribution and competent associates have zealously carried out the editor's aims. It is worth the price in every sense of the word.

**Atlas of Clinical Medicine.** By Byrom Bramwell, M.D., F.R.C.P. Edin., etc. Vol. I, parts i. and ii. Edinburgh University Press, 1891.

These are the initial numbers of an elaborate atlas series of colored, black and white, and photogravure plates,  $14\frac{1}{2} \times 10\frac{1}{2}$ , with a detailed description of the plates and text. It is intended to extend the publication over three years and to pretty thoroughly cover the entire field of medicine, or at least those portions of it which admit of illustration and description in this way.

The present fasciculi treat of myxœdema, sporadic cretinism, Friedrich's ataxia, Addison's disease, melanotic sarcoma, and Hodgkin's disease. The highest resources of the printer's art have been drawn upon in the preparation of these atlases. The text is exhaustive; it includes not merely a general discussion of the various topics illustrated by the plates, but also the clinical histories in full of the patients from whom the representations have been taken. It is thus an illustrated treatise on clinical and systematic medicine.

We are familiar here in America with works of this kind in several special lines, and also on the general subject of pathological anatomy, but we have nothing on clinical medicine which begins to approach the work of Dr. Bramwell. If the high character of the first two fasciculi shall be maintained throughout the series, the latter will certainly reach high-water mark.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## ANNOUNCEMENT.

Dr. Bernard E. Vaughan has resigned from THE EPITOME staff, and will be suc-

ceeded by Dr. Albert H. Leyton, Assistant Surgeon to Out-Patients, Presbyterian Hospital, who will have charge of the Department of Genito-Urinary Diseases.

## LEADING ARTICLE.

### SYMPHYSIOTOMY.

Not only in the line of patriotism have the events of the present season suggested the part Italy has played in the world's history, but the rise or rather revival of an obstetrical operation has called attention to her contributions to medical science.

Symphysiotomy is not a new procedure. Previous to 1860 it was done with disheartening results. Suggested by Pineau in 1598, and first practised upon the living female in 1777, it was performed eighty-five times up to 1858 with a mortality of about thirty-three per cent. After the latter date it fell in abeyance, and was not revived till 1866, when Morisani of Naples re-introduced the operation, and while his pioneer work has perhaps been surpassed by the brilliant results of other workers, and in more recent years, he still lives to witness the results of his earlier labors.

It is to that Nestor of midwifery-statistics, Dr. Robert P. Harris of Philadelphia, that we are indebted for a concise summary of what has already been accomplished in this direction. In a recent paper before the American Gynecological Society (see *Phil. Med. News*, Oct. 8, 1892, page 416), he relates that of the first forty cases, from 1777 to 1804, twenty-five women recovered and fifteen died; of the children twelve were saved and twenty-eight lost. The results of a second series of about the same number of cases were practically the same.

In 1863 Morisani commenced his work, and after three years of practice upon the cadaver, was successful in 1866 in saving both mother and child in his first case. Other operators entered the field and up to 1886 eight women and five children were lost in eighteen cases. Since 1886 thirteen operators had delivered forty women in this manner, six of the women enduring two operations with success and thirty-five of the forty children were saved.

The operation has undoubtedly a great future, and it remains for us to carefully study both its limitations and technique. According to Charpentier it is applicable to and indicated in contracted pelvis, not sufficiently deformed to forbid version or the use of the forceps. We should have a true conjugate diameter of from two and three fourth to three and a third inches. Here, after the artificial induction of labor, we have a choice between version, the forceps, and symphysiotomy. Spinelli had the remarkable result of recovery of the mothers in all of twenty-four operations, and the loss of only a single child. Antiseptic precautions were carefully employed, the cutaneous incision was closed with catgut, and dressed with bichloride gauze. After delivery the patient had daily three vaginal douches of solution of mercuric chloride, at first one to two thousand, afterward one to four thousand. The pubic

joint was usually firmly united in from four to six weeks. During that time the patient remained in bed, wearing a firm bandage about the pelvis. No case of permanent non-union is reported, the joint, as a rule, becoming strongly knit together.

The list of operators has now become quite large. In addition to those named above it includes Tarnier and Porak of France; Freund and Leopold of Germany, and Jewett, Hirst, and Broomall of Philadelphia, the latter a woman. During the last two years then, there have been thirty-four operations done in Italy, France, Germany, and America. As far as is known all the mothers have been saved and but two children lost.

Dr. Harris traces, with his accustomed clearness, the causes which have led to such brilliant success. He finds them largely in rigid antisepsis, and in the employment of subcutaneous section. As a result there is an absence of the dreadful lameness which was once urged against the procedure, the symphysis being readily made to reunite firmly under proper fixation of the pelvis. It is true that in four instances there was produced a fistula of the bladder or urethra, which Morisani claimed should not occur under proper precautions.

Harris does not regard the operation as applicable on a Robert's or Naegeli's pelvis, or in one where ankylosis has resulted from hip disease. Cervical cancer and obstructions from exostoses, tumors, etc., are also contra-indications. In the living woman two and one half inches of separation are a safe average, and this amount can very rarely be exceeded with safety.

There will be a difference in opinion as to how far symphysiotomy can supplant other obstetrical procedures. Hirst says (*Phil. Med. News*, Oct. 15, 1892): "It is applicable in contracted pelvis with a conjugate over sixty-seven mm., and, therefore, should be the method employed in almost all cases of the kind in this country, for a greater contraction of the pelvis is rarely seen among us. It should, moreover, almost entirely displace the Cæsarean section for a relative indication. It is a much simpler, an easier, and a safer operation. This is also the opinion of Leopold, who cannot be accused of prejudice against Cæsarian section, with his brilliant record in that field."

Harris (*loc. cit.*) has considered the ques-

tion of choice between the three incisive methods of delivery in cases of contracted pelvis: the improved Cæsarean, the Porro-Cæsarean, and symphysiotomy, and gives the technique of the latter. Obstetric surgeons are likely to prefer the improved Cæsarean section, especially as it is possible, under most favorable circumstances, to reduce the maternal mortality to six per cent.

On the other hand the preference of abdominal surgeons who are "successful in the Cæsarian operation will remain in favor of that procedure in contrast with symphysiotomy. The greatest need in obstetric surgery, at present, is some method of procedure by which labor can be successfully terminated in contracted pelvis without destroying the life of mother or child, a method available amid the surroundings of ordinary obstetric practice. In a well-appointed hospital, or with the co-operation of one or two intelligent colleagues, the Cæsarean operation will always give brilliant results, but if symphysiotomy in connection with induced labor, version, and the use of forceps, shall prove a resource which the individual practitioner of obstetrics can employ unassisted by professional help, it certainly will find a field of usefulness. It seems applicable to just those cases in which it is often difficult to decide that an abdominal delivery is absolutely necessary."

Hirst (*loc. cit.*) describes the technique of the operation as follows: "The technique of symphysiotomy is simple and easy. After thoroughly cleansing the field of operation and disinfecting the vagina as well, a short vertical incision is made on the abdominal wall, reaching to about three quarters of an inch above the symphysis. The attachments of the recti muscles are severed just sufficiently to admit one finger. The forefinger of the left hand is passed under the symphysis, and upon this as a guide the curved knife of Galbiati is inserted until its beak projects under and in front of the symphysis. The joint is then cut upward and outward. To avoid injury to the urethra, a metal catheter is inserted and pressed by an assistant downward and a little to the right, while the knife is placed a little to the left; but with Galbiati's knife I should think that there is little likelihood of cutting the urethra or the plexus of veins in its neighborhood. I at first thought that an ordinary probe-

pointed, curved bistoury would serve my purpose well enough, but I quickly laid it aside, and was glad to avail myself of Galbiati's knife, at the time one of the three, I believe, in the country.

"As soon as the joint has been severed, the wound should be covered with iodoform-gauze, and then the child extracted with forceps, or allowed to be delivered naturally, as seems best in the individual case. I should, I think, almost always prefer the forceps. It is well to have the trochanters supported by assistants during the passage of the child through the pelvis, so that the sacro-iliac joints shall not be injured.

"As soon as the delivery is completed the wound is sewed up, the lowest stitch, if desired, passing through the top of the symphysis. How the whole symphysis can be stitched up, as Leopold claims to have done, I do not understand. After closing the wound and dressing it, rubber adhesive strips are placed around the hips and lower abdomen, and a tight binder applied.

The symphysis unites surprisingly soon, and three weeks after the operation the patient, can walk as firmly and as well as ever."

Already a discussion has begun on the proper name for the operation. Forbes of Philadelphia (*Med. News*, Oct. 20th), says :

"The cutting of the junction of the two pubic bones, I humbly submit, should be called *pubeotomy*. This operation is now performed for the purpose of widening the pelvic diameter, thereby accomplishing, in certain cases of difficult labor, a safe delivery to both mother and child, as has been of late so well and so frequently demonstrated.

"Now, *symphysiotomy* is a term that may be applied to any symphysis, and we have several of them in the human body : thus, the sacro-iliac symphysis is not far from the symphysis of the pubes.

"The name *pubeotomy* is illuminating; it is restricting in its meaning to the part cut ; it is euphonic and in strict keeping with a proper scientific nomenclature."

## RECENT CONTRIBUTIONS TO FOREIGN LITERATURE.

TRANSLATED BY H. SOLOTAROFF, M.D.

**Bardet (Dr.) on Cocaine : Its Dangers and Indications.**—Cocaine is a very dangerous poison. Its action is quite insidious, for a large dose produces apparently no effect, while ten times a smaller dose may prove deadly. Its first action is to paralyze that system of nerves to which the nerve on which it was locally applied belongs. The organ connected with the nerve, or system of nerves, ceases to perform its functions until the paralysis passes. Almost a similar result is obtained when cocaine acts primarily on a mucous surface. A small quantity of about 2 per cent. is required to produce perfect local anæsthesia.

Administered internally cocaine exercises a paralytic action upon the nerves of the heart, and greatly excites the pneumogastric. At first there is great acceleration of the heart's action as indicated by the very rapid pulse ; soon, however, the pulse becomes greatly enfeebled and there are signs of cerebral anæmia, pale face, vertigo, a tendency to syncope, respiratory troubles, contractions of muscles, and in grave cases death with the heart in diastole.

In dentistry the most conspicuous characteristics of cocaine intoxication can be observed, as at the base of the mouth the solution is very rapidly absorbed, and this may also explain its rapid production of grave accidents, acting as it does in such cases upon the vicinity of the heart nerve-centres and that of the pneumogastric nerve. In the healthy state the mucous membrane of the bladder does not absorb a solution of cocaine contrary to the action of the mucous membrane of the rectum, and when, through disease, the mucous membrane of the bladder does absorb a solution of cocaine, it generally proves fatal to the patient.

For cocaine poisoning all means which tend to prevent paralysis of the heart, tendency to syncope and cerebral anæmia should be employed. It is a good plan to incline the patient with head down, and let him inhale from time to time amyl nitrite, douching at the same time his thorax with cold effusions, injecting caffeine per rectum if otherwise impossible to administer it. Lastly artificial respiration and electrization may render good service.

To avoid the toxic action of cocaine in dental practice, it is well to combine it with phenic acid, or use it in the following manner :

℞ Cocaine chlorhydrate.....	0.50
Antipyrine.....	1.5
Ag. Dest.....	8.0

M. S. Use in atomizer until insensibility of dental nerve is produced.

It is useful to note that cocaine should be used :

1. *In vaginismus* just before coitus, in a 10 per cent. solution. (Compardon.)
2. *In fissures of the anus*, when the fissure is not very deep, a rectal injection of glycerine and cocaine 2 per cent. will produce painless stools. (Bardet.)
3. *In gastralgia*. Dujardin-Beaumetz uses it in this affection in solution of 1 gr. to 500 c.c. of water during the twenty-four hours, in a quantity of soup.
4. *In uncontrollable vomiting*, 10 drops three or four times a day, of a solution of 10 per cent. (Engelmann.)
5. *In angina of the chest*. Injections of 5 milligrams in solution three or four times a day. (Laskevitch.)
6. *In parturition*, at the last moment of expulsion a weak solution may be used.
7. In burns or scolds after antiseptic washing use the following ointment :

℞ White vaseline.....	100 grammes
Cocaine.....	1 to 5 gr.
Sublimate.....	10 centigr.

—*Gazette Médicale de Liege*, Aug., 1892.

**Semmola on Syphilitic Cardiopathy.**—The author called the attention of the Paris Academy of Medicine to a series of investigations on apparently primitive cardiopathy dependent on late syphilis.

To illustrate the subject he presented the following case :

Mme. de Baron X—, forty-five years old, who had syphilis, suffered very much from a very irregular pulse and the consequences attendant upon a very irregular heart action. This was diagnosed as an arrhythmic neurosis, and treated accordingly for some time without any satisfactory results.

The author, being aware that the patient had had syphilis, thought that this disease might be a late manifestation of it, and accordingly he prescribed iodides and injections of sublimate. The patient recovered completely in about six months. The author was thus led, on ground of the good results he obtained in the reported case, to observe twenty-seven other similar cases

with almost similar results. In the face of these observations he considers himself allowed to deduce the following conclusions :

When a syphilitic presents symptoms of cardiac arrhythmia, with pain on respiration on the same side, resisting all hygienic and therapeutic means which regulate the cardiac functions, then, the author thinks, one is justified in supposing the disease due to late syphilitic processes, and to use the specific treatment.

The treatment, again, will reciprocally demonstrate the manifestations of the disease as those of late constitutional syphilis.

During the discussion Dr. Lancereaux did not attribute any great importance to the symptom of cardiac arrhythmia, and he thought that this symptom alone could by no means lead to the diagnosis of syphilitic cardiopathy.

The diagnosis of the disease, said the latter, rests in a symptom-complex of special evolution : Palpitation of the heart, shortness of breath, a systolic murmur at the mitral orifice, and later on a systolic phenomena appear, viz.: hyperæmia of the abdominal viscera, œdema of the extremities, anasarca, etc. He does, however, think that arrhythmia of the heart's action with pain on the same side on respiration, may draw the attention of the physician to the probability of syphilitic affection of the heart.—*Le Scalpel*, Aug., 1892.

**Faguet (M.) on Papilloma of the Ileo-cæcal Valve Producing Occlusion of the Intestines.**—The author presented to the Anatomical and Physiological Society of Bordeaux an anatomical specimen taken from a patient in the service of Prof. Lanelongue, who entered the hospital showing all signs of intestinal occlusion due to the swallowing of a large quantity of cherries with their stones.

The use of electricity and massage gave no good results, and Prof. Lanelongue performed laparotomy six days after the accident. At the ileo-cæcal valve a considerable mass was detected, and when the obstacle was well seized the portion of the intestine was resected. The double intestinal suture was done and an artificial anus established, and the patient recovered quickly.

On examination the mass was found to be a papillomatous tumor of the opening of the ileo-cæcal valve.—*Gazette Hebdom. des Sci. Méd.*, July, 1892.



**Valentin-Desormeaux on Eclampsia Provoking Delivery at Seventh Month and One Week.**—The patient carried her second child. The pregnancy was more or less normal up to the sixth month, when the patient suffered an attack of influenza.

After the attack she again felt well up to February 3d, when she suddenly had violent convulsions ending with coma.

At noon she had two fits of eclampsia. Chloral hydrate and bromide of potassium were administered and venesection, drawing off some four hundred grs. of blood, was done. The author saw the case for the first time the same afternoon, when, in all, there had been four eclamptic fits. After an antiseptic vulvo-vaginal douche it was found on examination that a live child presented itself in the position of R. O. A. Version by external manipulation was impossible, as the slightest palpation of the abdomen provoked a fit. Chloroform was given, as it was decided to induce labor; for that purpose dilatation of the cervix was begun late in the evening by means of Champetier de Ribes dilating balloon. The patient had about fourteen eclamptic attacks. On the next morning the dilator was found in the vagina and a foot presented. The woman was delivered of a live child after five and a half hours of labor. After delivery an intra-uterine injection was made. In all the patient had sixteen attacks of eclamptic fits. It is to

be regretted that the placenta could not have been fully examined.

The child succumbed the same evening, but apparently from lack of proper temperature, while the mother recovered nicely. The author wishes to impress two points: (1) that the albuminuria in the case was probably due to the attack of grippe which the patient suffered, and (2) that when delivery *must be produced* one can rely upon the sure and rapid action of Champetier de Ribes dilator.

In the discussion on the subject before the Med. Soc. of Nantes, M. Guillement thought that four hundred grammes is not a sufficient bleeding, and though Professor Olive is also a partisan of bleeding, under the circumstances, he is altogether against too copious a venesection.

M. Guillement, though acknowledging the utility of Champetier de Ribes dilator, thinks it, however, quite dangerous to use it. He would prefer the exciting ballon of M. Tarnier. To the last remark the author replied that, under the circumstances, it was impossible to use Tarnier's dilator, on account of the rapid action which was required in order to save mother and child. Even five and a half hours are too much time consumed in producing labor under the circumstances, and he does not ascribe to a subsequent post-partum hemorrhage, which may follow, such serious significance as to the conditions demanding immediate delivery. — *Gazette des Hôpitaux de Toulouse*, Aug. 18, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY HENRY L. SHIVELY, M.D.

**Lovett (R. W.) and Morse (J. L.) on a Transient or Ephemeral Form of Hip-Disease.**—In thirteen cases diagnosed as tubercular arthritis at the Children's Hospital, there was a rapid recovery and no recurrence after from two to four years. A certain proportion of these cases were doubtless simple synovitis, and the early diagnosis is difficult, the chief points of difference being that in synovitis the pain was out of proportion to the muscular rigidity in most cases, and was a voluntary restriction rather than a true reflex spasm. But these are very slight matters, and quite insufficient to establish a differential diagnosis. The fact that the

symptoms follow closely upon injury can be allowed very little weight, because it is found among hospital patients that a certain proportion of children with hip-disease come with exactly this history, the fall being the occurrence which calls the attention of the parents to the child's disability, which may have been of many weeks' standing.

Others are rheumatic in origin; but certain of these cases which recover so quickly show characteristics which cannot be accounted for by a simple synovitis, and one must assume that an affection of bone has been present. With regard to its pathology, all must be conjectural. It is probable that

in these cases the focus of tuberculous disease is situated in a part of the epiphysis remote from the joint, and that in its growth it causes enough disturbance in its neighborhood to give rise to symptoms of joint irritation. The fact that joint irritation may be caused by a focus of disease which has not ruptured into the synovial cavity has been clearly demonstrated. Having caused these symptoms of joint irritation, it seems probable that the focus of disease either becomes quiescent or grows away from the joint if it continues active, and after a brief time the symptoms subside.

These cases do not present any early symptoms different from those of hip-disease of the common type, so that their recognition seems impossible; moreover, hip-disease is characterized by such marked remission of symptoms that this type of disease is easily simulated in that way. But the fact remains that, even if one leaves out of consideration cases of acute synovitis, certain cases presenting all the symptoms of true hip-disease run their course to a favorable termination within a few weeks or months, and the matter is one of such practical importance that it deserves recognition.—*Boston Medical and Surgical Journal*, Aug. 18, 1892.

**Hogman (A.) on a Case of Incomplete Development of the Pectoralis Major.**—The author describes a case of congenital abscess of the costal portion of the pectoralis major occurring in a boy eleven years old. On the right side, where the anomaly occurred, the bony thorax was less developed, and the ribs appeared to be simply invested with skin and fascia. The axillary space was of a more triangular form than on the left side, the anterior wall being wanting. The right deltoid was hypertrophied and the chest on the right side flattened, the deformity in this latter respect resembling that occurring in rotary lateral curvature on the side corresponding to the dorsal projection of the ribs. In this case, however, the ribs were perfectly symmetrical and regular in their attachment to the spine. The respiratory movements of the chest were normal, and the boy can play, write, draw, etc., with little inconvenience. In prolonged exertion of any kind, however, the right arm becomes more easily fatigued than the left. In all other respects the boy appeared healthy and free from deformity, and he has never had any dis-

ease which could have resulted in atrophy of the pectoral group. No trace of the pectoralis minor could be found, and the author infers that this also was wanting or but slightly developed.—*Revue d'Orthopédie*, Sept., 1892.

**Horrocks (W.) on the Slighter Forms of Flat-Foot Symptoms.**—1. The peculiar waddling gait, the knees being kept straight in walking, the sides of the pelvis are thus alternately tilted.

2. Pain over the head of the astragalus, which is usually prominent, is a common symptom. This pain may be felt only after exertion, while standing, but it is sometimes present when at rest.

3. Pain over the cuboid is less frequently complained of.

4. Pain and stiffness of the first metatarso-pharyngeal joint, with enlargement of the head of the metatarsal bone, is a symptom of frequent occurrence.

5. The feet are commonly blue and swollen, with chilblains on the smaller toes. Excessive secretion of sweat is frequently present.

6. The shoes of persons suffering from flat-foot are worn in a peculiar fashion. The inner side of the sole and heel is worn down, and frequently the upper is used as part of the sole. The forepart of the shoe is also broadened, the welt being overlapped by the upper.

**Treatment.**—Two objects are to be aimed at in the rational treatment of flat-foot.

1. The strengthening of the weakened muscles.

2. Rest of the over-strained, relaxed teguments by:

(I.) Strengthening muscles.

(II.) Removing superincumbent weight.

(III.) Artificial supports.

To strengthen the muscles, we have two useful aids—exercise and massage. Exercises may be given, using the weight of the body as a resistance, or another person may resist attempted movements. The most useful exercises are:

1. Walking on the toes, with the heel raised from the ground. In this exercise the sustentaculum tali is raised and the weight directed forwards along in two directions. If the heel is raised too high, the exercise is useless, as the weight then transmitted is only through the head of the astragalus.

2. Walking on the outer side of the foot, with the inner side raised. This throws

all the weight on the outer support, and relieves entirely the inner support of the arch.

3. Assuming the position of the foot in the deformity of talipes equino-varus, with the heel raised and turned inwards. This exercise strengthens the flexor tendons, and rests the relaxed ligaments.

Resisted movements are made by getting the patient to flex or extend the ankle, invert or evert the foot, each action being resisted by just enough force to call forth the patient's muscular effort without overtiring the muscle.

Massage improves the muscular nutrition. To allow the ligaments to recover their condition, rest is essential. The patient should avoid standing or overtiring the weakened muscles. As the muscles become stronger, no artificial support is required, but at first it may be needed. The best support is a specially made boot, with the inner border of the sole straight. The heel is made low and broad, and the fore part of the sole wide. The inner side of the sole and heel is raised a quarter to half an inch higher than the outer. By this means the foot is thrown on its outer border and the inner side raised. Another method is the insertion of a conical pad of felt, fixed by strapping, to support the head of the astragalus and the inner border of the foot. Unless the strapping is tightly applied very little support is given, while the constant movements of the feet soon slacken and displace the strapping. Lastly, a sock, covered with leather, with a steel support on the inner side, is useful. In ordering

this, a tracing of the foot should be taken, and directions given that the steel support reaches no farther forward than the heads of the metatarsal bones. These supports are to be looked on as helps in the early treatment, not as curative measures.—*The Provincial Medical Journal*, Aug. 1, 1892.

**Jalaguier (A.) on the Correction of Ankylosis in Bad Position, Consecutive to Obturator Dislocation in Hip-Joint Disease.**—The author compares two cases, one treated by complete resection of the head of the femur, the other by a simple osteotomy between the trochanters. In the former a cure was effected at the end of eighteen months, in the latter a result equally good was obtained in two months. Theoretically, resection would seem to be the better operation, in that a more or less mobile new joint is substituted for a complete ankylosis, but in practice this ideal result is exceptional after resection of the hip. The writer agrees with Oliver that there is little hope in the majority of cases of securing a movable joint after removal of the head of the femur. Moreover, on account of the firm consolidation of the bone with the obturator fossa, its removal is not easy. On the other hand, patients operated on by sections of the neck of the femur or osteotomy below the neck walk so well and so securely, and their endurance is so great when the other limb is sound, that there should be no doubt of the superiority of this operation, even apart from the consideration of the much shorter time required in effecting a cure.—*Revue d'Orthopédie*, Sept., 1892.

## REPORT ON THERAPEUTICS.

**The Curability of Ascites.**—It is necessary chemically to divide all cases into two classes, viz.: those in which the liver is enlarged and those in which it is not. The prognosis in the former category is by no means hopeless. Cheadle collected thirty-three cases of recovery and in all of them in which the size of the liver is noted, the organ was enlarged. The two great factors in the production of hepatic cirrhosis are alcohol and syphilis, the former being the most frequent agent in determining the inflammatory lesions which culminate in cirrhosis, but, as is pointed out, there is a certain social relationship between alcoholism and syphilis which renders it difficult

to draw a sharp line so far as the etiology is concerned. Turning to treatment, we find it has not as yet been markedly influenced by the advances in our knowledge of the morbid anatomy of this affection. The dreary routine of purgatives and diuretics, with paracentesis as a last resort, has been maintained to the prejudice of the patients and to the despair of the physician. The patient is already extremely debilitated by the disorganization of his internal economy, and to administer to such a person drastic purgatives with tedious reiteration is to do him more harm than good. As to diuretics they are inoperative, because the pressure of the contained fluid on the kidneys has

disorganized the urinary service and incapacitated these organs from responding to stimuli. Remove the pressure by means of paracentesis and then diuretics will act, but not otherwise. There is, to be sure, the exclusive milk diet, for which admirable results are claimed by Professor Semmola in the curable class of cases, but as it requires to be enforced, not for weeks, but for months, the patients are apt to opine that the remedy is worse than the disease, and to kick over the traces. Dr. Cheadle is strongly in favor of tapping early and tapping often. By relieving the intra-abdominal pressure, the best chance is afforded for relief to the congested portal circulation by the establishment of a collateral circulation through the venous anastomoses. Collapse need not be feared if paracentesis be performed early; peritonitis may be avoided with certainty if the trocar be aseptic, and the patient is spared the visceral complications which are the inevitable consequence of the continued presence in the abdomen of a large quantity of fluid at high pressure.—*Ed., Eng. Med. Press*, Sept. 28th, 1892.

**Senn (N.) on an Experimental Inquiry Concerning Elastic Constriction as a Hæmostatic Measure.**—My clinical experience and the results of these experiments have induced me to formulate my views on elastic constriction as a hæmostatic agent in the following conclusions, which I will submit to you for consideration and discussion:

1. The use of the elastic bandage to secure a bloodless condition of a limb should be discarded, as compression of the parts affected may produce mechanically dissemination of malignant tumors and microbic diseases.

2. A bloodless condition should be secured by elevation of the limb prior to constriction.

3. Constriction should be made with sufficient force to interrupt at once both the arterial and venous circulation.

4. Prevent venous stasis by constricting quickly, beginning pressure on the side of the limb supplied with the principal blood-vessels.

5. Linear or too firm constriction should be avoided, as they are liable to give rise to muscular injury and temporary or permanent paralysis due to harmful compression of a large nerve trunk.

6. Elastic constriction of a limb for hæmostatic purposes should be diffused

over an annular space not less than two inches in width, and can be made with least danger of injuring important structures by an elastic band made for this purpose or an ordinary elastic bandage.

7. Circular constriction of a limb should be made, if possible, at a point where the large nerve-trunks are well protected by overlying muscles, and if this cannot be done on account of the site of operation, a thick compress of gauze should be interposed between the constrictor and the limb.

8. The vitality of the tissues when excluded from the circulation is endangered by prolonging the ischæmic condition for three or four hours, and gangrene may take place if constriction is continued for a longer time.

9. The process of karyokinesis in tissues temporarily deprived of circulation by elastic constriction is unfavorably affected if constriction is continued for more than two hours.—*Ft. Wayne Four. Med. Sci.*, Sept., 1892.

**Bed Clothing for the Sick.**—In hospital as well as in private practice, great errors are made in the matter of bed-clothing for the sick, and particularly for the sick who are suffering from febrile affections. We have got rid of the heavy curtains around the bed; of the grand accumulator of dust and other uncleanness, the tester; of the heavy valance which converted the under-part of the bed into a close cupboard, in which all kinds of unwholesome and cumbrous articles lay concealed, including sometimes excreted matter itself; and we have banished the carpet, which, often as a hard-trodden, dust-laden rag, made the floor beneath the bed persistently impure. This is all good reform, but we have still not advanced sufficiently in the reforms necessary for bed and bedding. The old feather-beds, flock mattresses, heavy blankets, thick, impermeable, and dense counterpanes, still encumber many a patient, rendering ventilation of his body as impossible as in the days of our forefathers. It does not indeed seem as yet to have been accepted by physicians, still less by nurses and patients, that the body calls for ventilation; that a bedroom or ward may be the purest in a general point of view, and yet that the advantage which ought to arise may be considerably curtailed by the unwholesomeness of the bed

and bedding, and by the patient making an unwholesome atmosphere for himself in his immediate surroundings. The universal improvement that is now called for in the direction named consists in substituting porosity for density in all articles of bedding. The thick dense bed and mattress require to be replaced by the light steel elastic bed; and the clothing under and upon the patient, now so close and heavy, require to be replaced by clothing that is porous, so that it can be permeated with pure air from without, and can at the same time permit the warm and impure air from the patient to have free exit. Under such condition of clothing there is a double current of gases going on in the clothes, which is most purifying, cooling, and refreshing; the noxious odors which so easily accumulate under dense bed-clothes have then no abiding place; and febrile heat is dispersed instead of being retained as an addition to the evil that already exists.

The mistake now so generally made lies in the idea that the warmth which the bed calls for is best obtained by close material and close packing. The error is positive. There is nothing that retains warmth in so good and equable a manner as common air at rest. Dense materials, as Count Rumford demonstrated, cannot keep the body respirably warm. If they are non-conductors they may retain the heat, but then they retain also the cutaneous transpiration; whilst air, a splendid non-conductor, permits the freest diffusion of cutaneous emanations. Materials therefore both for the bed and for the bed-clothing ought to be porous to a free mechanical extent of porosity. The rule holds good for the clothing of the body in health; in sickness it is imperative.—*Asclepiad*, No. 35, 1892.

#### Wells (F. X.) on Healing of Wounds under Aseptic Blood-Clots.

—At a recent meeting of the Cook County Hospital Clinical Society, Wells read a paper on this topic and exhibited cases. He said that until recently the presence of blood in a wound was thought by all surgeons to be a source of danger to the patient, as the blood-clot was thought to be very prone to decompose. Every means was adopted to prevent the presence of blood, as drainage, buried suture, etc. The drainage-tube is sometimes inefficient, and often a source of infection by keeping the wound open unnecessarily long. Often a

line of pressure-necrosis formed along the tube which caused a persisting sinus. The gauze drain has the same objections, but perhaps to a less extent. The secondary suture exposes the wound to greater danger of infection and requires a second operation. The buried suture coaptating tissue to tissue requires considerable time, the tissues are needlessly disturbed, the circulation enfeebled, and the vitality of each part impaired which might otherwise be able to dispose of a large quantity of exudate or micro-organisms. The suture often caused trouble and was thrown off, and it is doubtful if it ever obliterated all the dead space.

After alluding to the introduction of the measure by Schede in 1886, and the remarkable success attained with this method by Halstead at the Johns Hopkins Hospital, he adds: The points in favor of this manner of treatment are that blood-serum is found to be antiseptic to certain species of bacteria, but it does not appear to be injurious to the multiplication of the staphylococci and streptococci of suppuration. The blood-clot is too highly albuminous to support the pyogenic bacteria. In a wound in which the tissues are mutilated during the operation in every possible way, as irrigation, stuffing with gauze or tube, and necrosis of areas by ligature, a blood-clot may not organize. The clot forms a scaffolding upon which the granulations may climb and later take the place of the clot. Tissue defects are beautifully repaired. Time is saved and fewer sutures required.

Technique of the operation: The part is shaved, scrubbed with hot sterilized water and green soap for thirty minutes, washed with sterilized water, alcohol, ether and one to five hundred bichloride solution; wound is freely doused with sterilized water, no antiseptics being used, and closed with buried skin suture of the finest silk, covered with protective and dressed with iodoform and sterilized gauze.—*Chicago Med. Recorder*, Sept., 1892.

**Richardson (B. W.) on Methylene for Internal Administration.**—Methylene bichloride, commonly called methylene, a substance made by the reduction of chloroform under the action of zinc, and which was brought out as a general anæsthetic in the year 1865, has up to the present time been employed only as an anæsthetic. It has many properties which commend it for administration in solution alone or in com-

bination. Methylene is a little more soluble in water than chloroform, is pleasanter to the taste, and blends more easily with other medicinal fluids. The dose of it runs from five minims to thirty, and in the largest of these doses it is agreeable to take when freely diluted with water. In action it is antiseptic, slightly stimulant, antispasmodic, and anodyne. Its antiseptic properties are remarkable, and, in combination with peroxide of hydrogen, it forms perhaps the best of all antiseptic combinations. In typhoid it is believed to be by far the best. The prescription runs as follows :

℞ Methyleni bichloridi..... 3 j.  
Solut. hydrogenii peroxid. (to volumes)..... 3 j.  
Acid hydrochlori diluti..... ℥ xxx.  
Aquæ destillatæ..... ad 3 vj.  
Fiat mistura. A twelfth part to be taken in half a tumbler of pure water every three hours or as directed.

This mixture may be used by the patient as if it were a simple drink. It does not interfere with the action of food ; the tongue becomes clean under it, and the pyrexia falls. The same solution may also be administered, in typhoid, by enema. As an antiseptic and antispasmodic, methylene goes well with infusion of cinchona, with or without mineral acid. It joins equally well with soda salicylate in the treatment of acute rheumatic fever, when, with the pyrexia and swollen joints, there is much pain.

There are some other methods of employing methylene, as in combination with ammonia and with narcotics like opium and cannabis indica ; but the principal object in this opusculum is to draw attention to its service, in combination with hydrogen peroxide, in the treatment of typhoid. I would not, in this stage of inquiry, venture to say that typhoid can be aborted by this treatment, but I am satisfied that under it we are approaching very near to the right plan, and that by industry in this line of inquiry we cannot fail to arrive at remarkable results. The treatment may be designated as *antiseptic oxygenation*.—*Asclepiad*, No. 35, 1892.

**The Value of Lithia Waters.**—It is one of the curious developments of modern medicine that remedies largely used by practitioners for years are suddenly shown to be lacking in the powers generally attributed to them. For years the profession has used lithia water in various diseases

with the idea that the results obtained were due to the comparatively small quantity of lithia present in solution. Those physicians who examined the subject closely speedily concluded that the greater part of the benefit derived by patients from so-called lithia waters depended rather on the large amount of pure water ingested than upon the lithia contained in it. In other words, the pure water practically flushed the body of impurities. These conclusions were still further supported by the discovery on analysis that one of the widely-advertised lithia waters, indorsed by a large number of misguided persons, was only a pure water, with practically not a trace of lithia in it. Still more recently, Haig has told us that while lithia speedily combines with uric acid in a test-tube, in the body it has a greater affinity for the acid sodium phosphate in the blood, and combining with this leaves the uric acid untouched. Lithia waters should be used not for their lithia but for their purity, and the results obtained placed to the credit of the flushing of the system, not to the lithia.—*Therap. Gazette*, Oct. 15, 1892.

**The Surgical Uses of Ichthyol.**—The sulphichthyolate of ammonium is the best preparation to employ. It is a thick, dark-brown, greasy, bituminous-smelling solution, soluble in alcohol and ether, in water, and in all the oils and fats, and is not readily decomposed. It seems to be devoid of toxic effects, at least when it is applied only to the surface, and even by the stomach it can be given in large quantities without evil results. It has some antiseptic power, but this is by no means pronounced. Its special value lies in the constricting action it exercises upon the vascular system. This is, perhaps, nowhere better shown than in erysipelas. In this disease the drug can be used either as a thirty to fifty per cent. ointment, with lanolin and lard, or perhaps better in the form of a thirty per cent. solution in water. It is painted two or three times daily over the inflamed area, especially about its border. When used before the disease has made great headway these applications are almost specific. Fever promptly subsides, the disease ceases to spread, and resolution takes place in a few days. This is accomplished not so much by the specific action upon the streptococcus as by the vaso-motor action by which the blood-vessels are constricted, and thus the

micro-organisms are deprived of their nutriment and cease to multiply rapidly.

The general erythematous swelling so often observed about septic wounds, acute angioleucitis, acute oedema accompanying inflamed ulcers, all surgical conditions associated with dilatation of the superficial blood-vessels and the consequence of such dilatation, yield more readily to the applications of ichthyol than perhaps any other local medication. Where the skin is exceedingly sensitive, solutions of about ten per cent. (or ointments) should be employed, gradually increasing the strength until it reaches forty or fifty per cent. When these stronger preparations are used, the whole surface to which they are applied should be washed with mild soap and warm water once daily, and should be carefully dried before another application is made.

Hemorrhoidal conditions, particularly when associated with subacute inflammation, are said to be peculiarly benefited by ichthyol administered both internally and locally. The dose for internal administration is from 3 to 5 grains three to five times a day. Thus used it is supposed to benefit hemorrhoids by its favorable effect upon the portal circulation.

Acne and acne rosacea are perhaps the two skin diseases upon which the reputation of ichthyol as a specific is mainly founded. In such cases the drug is used both internally and externally.

In furunculosis local applications of a fifty per cent. ointment made up with lanolin or lard give better results than any other single treatment. If this remedy is applied in the forming stages of a boil, the latter is frequently aborted.

In adenitis, in cellulitis, in all the deeper forms of inflammation, local applications of ichthyol are not of the slightest service. The drug has been extravagantly lauded in the treatment of gonorrhoeal rheumatism. Here again its use is as disappointing as has been the use in other medicaments. In articular rheumatism its application is sometimes followed by prompt subsidence of pain.—*Therap. Gazette*, Oct. 15, 1892.

**Waugh (W. F.) on Diabetes Mellitus; Quick Recovery under Diet and Strontium Lactate.**—A gentleman of sixty years, large frame, well built, full blooded, a man of wealth but still active in business, has suffered for several years with gout. He is fond of good living, but not more than usual with men of his class.

During this period he has shown also such symptoms as aroused the suspicion of diabetes, and on several occasions the urine was analyzed, but with negative results. However, in June he came in with the report that for three months he had been losing flesh and strength, and passing large quantities of urine. The tests now demonstrated the presence of sugar in the proportion of  $3\frac{1}{2}$  per cent. He was placed upon the ordinary diet for diabetes, and given the solution of strontium lactate (Paraf-Javal), a tablespoonful before each meal. The good effect was manifested at once; and the proportion of sugar in the urine began to decline. In three weeks the glycosuria had ceased, but he presented symptoms of rheumatism. This was attributed to the lactic acid in combination with the strontium; and a mixture of sodium salicylate and colchicum was substituted, with good effect. The rheumatic symptoms subsided, but the strontium was not resumed, as no sugar could be found in the urine. The anti-diabetic diet was, however, continued in its full rigor for over two months, and even then but slight modifications were permitted. This was but little hardship, as the patient's general health was so good that he remarked that he was willing to continue the restricted diet indefinitely.

This case is remarkable for the speedy disappearance of the sugar, and the ease with which the restricted diet was borne. In regard to the diagnosis, there was the age and the habits that tend to produce diabetes, the rapid failure of health, and loss of strength and weight, coinciding with an enormous flow of urine, containing sugar in large quantities, with some other symptoms that need not be detailed.

The strontium salts have been recommended very highly as remedies in Bright's disease, but so far I have not obtained results much, if any, better than those secured by the ordinary saline diuretics; certainly no result has been manifested as brilliant as in this case of diabetes.

**Frölich (J.) on the Therapeutic Application of Salophen.**—Frölich has made a trial of the remedy in rheumatism—as an antipyretic and as a disinfectant and antiseptic.

In rheumatism he found that the pains subsided in three or four days even in the joints most severely affected, and six to eight days later the acute swelling had dis-

appeared. Effusions of slight extent into the joints were readily and completely absorbed, while large exudations remained either unaffected by the salophen, or absorption was brought about only with the aid of sorbefacients and massage.

As an antipyretic in phthisis, salophen was a failure, but in measles, pleuro-pneumonia-erysipelas, etc., it was very satisfactory.

In cystitis—gonorrhœa—and various other surgical conditions the remedy was given internally, or used on the affected surface either in solution or in powder; it gave fairly satisfactory results, though not exceeding in value various other remedies.

In general the remedy is to be placed in the same category with sodium salicylate and salol, as regards efficiency, but is preferable to them for the following reasons: (1) It is not hygroscopic, and may, therefore, be preserved in any form; (2) it is tasteless, in contrast to the disagreeable taste of sodium salicylate and salol; (3) and this is its chief advantage,—it may be administered, even in large doses, for a long time, without the disagreeable after-effects of the other salicylic-acid preparations, such as loss of appetite, nausea, vomiting, vertigo, tinnitus aurium, and even collapse, for the reason that salophen is not decomposed until it reaches the intestine, and, therefore, cannot have any action upon the stomach.—*Wien Med. Wochensch.*, Nos. 25-28, 1892.—*Phil. Med. Bull.*, Oct., 1892.

**Hendley (H.) on Strychnine and Digitalis in Diarrhœa.**—Hendley has used strychnine alone or combined with tincture of digitalis or salicylate of sodium in a very considerable number of cases in which diarrhœa has been accompanied with symptoms denoting a general want in tone, and with much success. The last very important case occurred in a native woman who had four days previously confined of twins. She had been attended by partly-qualified lady-doctors, and everything that could be done had been done. She had lost much blood, she had fever ranging from 102° to 103° F., when I saw her she had a diarrhœa, *plus* an ill-contracted uterus. No success had attended efforts to stop the diarrhœa by means of astringents, and when I saw her there appeared to be no hope of her recovery. Astringents were at once stopped and a mixture containing liq. strychninæ ℥v., tincturæ digi-

talīs ℥v., and liq. bismuthi et ammon. cit. ℥viii. in each dose was given in peppermint water, for the first three doses every two, and then three, and later four hours. Here the immediate effect was not very evident; but later on there was very marked improvement, the extreme feeling of cardiac distress during the passing of a motion soon passed off, the stools became less watery, but in the first forty-eight hours decreased frequency was not apparent. The patient made a slow but complete recovery.—*Practitioner*, Aug., 1892.

**Eliot (Gustavus) on the Specific Treatment of Typhoid Fever.**—The form of specific treatment of which it is my purpose to speak embraces the use of calomel, in connection with the tincture of iodine and carbolic acid. This method of treatment was described by Dr. James C. Wilson before the College of Physicians of Philadelphia, on January 3, 1883, as one which he had employed during the preceding year, and a brief account of it was published in the *Medical News* for January 20, 1883. Bartholow, as stated by Wilson, had previously used the following prescription:

B Tincturæ iodinii..... 3 ij  
Acidi carbolicī..... 3 j  
M. Sig.: Two or three drops three times a day.

Wilson used the same combination, giving, one, two, or three drops every two or three hours through the day and night. He also prescribed from seven and a half to ten grains of calomel, to be taken every second night until three or four doses had been taken.

It is my practice, in commencing the treatment of a case of enteric fever, to direct that the patient take ten grains of calomel every other day until four doses have been taken. I also order a mixture which contains one drachm of carbolic acid and a sufficient quantity of tincture of iodine to make four drachms, and direct that four drops of this, in a wineglassful of cold water, be given to the patient every four hours. For children smaller doses are of course prescribed.

The remainder of the article is a discussion of the disease in a general way. The writer calls special attention to the importance of a prompt diagnosis and an early commencement of treatment.—*N. Y. Med. Four.*, Aug. 6, 1892.



**Waller (J. J.) on Turpentine in Typhoid.**—I do not believe that typhoid should be considered to dwell alone in Peyer's patches; the nervous system is prostrated, especially the sympathetic. The secretions, and they are governed by the sympathetic, do not continue with the usual vigor. The mouth is dry, stomach often nauseated and the bowels tympanitic and full of gas—all we imagine due to the lack of proper secretion.

Turpentine is a good stimulant to the sympathetic, for under its use the mouth becomes moist and the tympanites relieved. If the secretions of the intestines, both mucous and serous, be aroused by turpentine (which we assume to be a fact), the gentle vermicular action is facilitated, and as a result the gases are either not generated, or else they are expelled or absorbed, and the pliant coat of the bowel is not so subject to extensive ulceration and inflammation.

B. Spirits Turpentine..... dr. iss  
 Po. Acaciæ.....  
 Sach. Albæ..... ãã dr. ii  
 Tr. Opii Camph.....  
 Listerine.....  
 Aq. Camphoræ.....  
 Aq. Cinnamomi..... ãã oz. i  
 M. Ft. Emulsion.

The opium, benzoic acid, ol. anise and camphor protect the kidneys, and at the same time the opium and camphor support and quiet the brain and nervous system. The listerine keeps the stomach in good condition, while the eucalyptus it contains acts as a febrifuge tonic.—*So. Med. Record*, Aug., 1892.

**Hare (H. A.) on Strychnine in Shock and Anæsthetic Collapse.**—I wish to call attention to the use of strychnine as a remedy for and preventive of surgical shock and anæsthetic collapse, not to speak of its value in opium-poisoning. In these conditions atropine, while very useful, so far as its vaso-motor effects are concerned, does not compare with strychnine either theoretically or practically. To those who habitually employ atropine and morphine injections prior to the use of an anæsthetic, let me recommend the use of strychnine or strychnine and atropine combined. There is one point to be remembered in regard to the use of strychnine in shock or accident, and that is to give it in full doses or leave it alone. Not less than  $\frac{1}{4}$  grain should be employed hypodermi-

cally every half hour in an adult, and, if the condition of shock or respiratory and cardiac failure be marked, one dose of as much as  $\frac{1}{4}$  grain may be given in this way. Disagreeable effects rarely, if ever, follow, and if they do, will amount to little more than muscular twitching, which can readily be governed by sedatives, for if the drug can stimulate the nervous system sufficiently to cause irritability, it will have pulled the patient out of the "Slough of Despond," and he will be able to stand further treatment should the effect of the strychnine be excessive. Under the conditions spoken of, the man is on the brink of death, and we cannot afford to make haste slowly in dragging him back. A few moments lost, and he may be beyond reach, and so far over the edge that human aid cannot draw him back to life.—*Therap. Gazette*, Oct. 15, 1892.

**Brown (B.) on Intestinal Septic Infection in Typhoid Fever, and its Treatment by Means of Iodoform, Creosote, and Sulphide of Calcium.**

—The experiments made by myself, in the past five years, upon some twenty cases of typhoid, convince me that we possess, in iodoform, creosote, and sulphide of calcium, efficient antidotes to the intestinal sepsis of typhoid fever. I have experimented with other antiseptics, as naphthaline, but they are far inferior to the former. Indeed, I am free to say, that, in the three antiseptics mentioned are to be found the best agents for this purpose. When given in capsule or pill form, they do not in the least offend the palate or stomach. On the contrary, I believe that, in the grave forms of the disease, when the digestion and assimilation are almost in a state of suspension, they will promote those processes.

In the adynamic forms of typhoid fever, with putrescent conditions of the intestinal canal, and great reduction of vital action, I now always give the calcium in pill form, in connection with creosote and iodoform. The article is given in pill form, as prepared now so nicely in one-grain doses, every third hour.

The iodoform and creosote are given according to the following formula:

B. Iodoform . . . . . 3 ss  
 Creosote . . . . . 3 ss

M. Capsules No. xxx. Sig.—One capsule every three hours.

If diarrhœa is present to an excessive extent, a small quantity of opium is com-

bined in the capsule. If hemorrhage is present, then I find the following combination the most efficient of all others for arresting it:

B. Iodoform . . . . .	℥j
Creosote . . . . .	gtt. xx
Tannin . . . . .	℥ij
Opil pulv. . . . .	grs. v
Ergotine . . . . .	℥iss

M. Capsules No. xx. Sig.—One capsule every hour or two hours, according to the extent of hemorrhage.

I am convinced that the antiseptic action of these agents exerts very much the same influence on bacterial formation and life in the intestinal ulceration and over the septic changes in the putrefactive and fermentative processes in the intestinal canal that they do on a wounded surface.—*Va. Med. Month.*, Oct., 1892.

**Murray (A. B.) on the Treatment of Carbuncle by Injection of Carbolic Acid.**—In three cases thus treated, the carbuncles, situated on the posterior surface of the neck, were from two and one half to four inches in diameter, tense, swollen, and very painful. They appeared first as mere papules, arousing no apprehension until the surrounding tissue assumed that brawny, tense appearance typical of a true carbuncle. The pain was of that pulsating variety that makes one dread each contraction of the heart. The needle of the hypodermic syringe, containing fifteen minims of pure carbolic acid, was thrust deeply into the centre of the inflamed tissue, the direction of the needle being changed three or four times while the fluid was being injected. This operation caused most intense pain for only an instant, the local anæsthetic power of the acid asserting itself almost immediately. Within forty-eight hours after this treatment the severe pain diminished, and soon became so slight that there was appreciation of inconvenience only upon exerting the action of those muscles underlying the carbuncle. The brawny and swollen tissues, before so exquisitely sensitive, became of a more healthy appearance and only slightly tender, the active inflammatory process seeming to centralize or "point."

After the tenth day the course was that of an ordinary furuncle, the carbuncle asserting itself only in the prolonged suppuration and casting off of portions of gangrenous tissue. The advantages of this method of dealing with this exceedingly troublesome affliction is, that the

course of the inflammation is much shortened, the pain and general malaise to a great extent done away with, and the patient relieved of that old-time nuisance, the poultice. The relief of the pain alone would certainly be deemed, by one who has suffered with a carbuncle, sufficient excuse for this mode of treatment. The success attending this little operation would seem to warrant its more general application, not only in cases of carbuncle but in the more common furuncle. It would probably be difficult, however, in many cases, to persuade the patient to submit to this procedure on account of the attending pain. This objection may be readily overcome by spraying the carbuncle with ether until local anæsthesia has been produced; then thrusting the hypodermic needle deeply into the tissue through the anæsthetized area.—*N. Y. Med. Record*, Oct. 15, 1892.

**Hutchinson (W. F.) on Phenacetine. Some of its Effects in the Nervous Sequelæ of Grippe.**—Among special symptoms accompanying the neurotic side of grippe may be enumerated insomnia, loss of appetite with steadily progressive physical debility, perversions of sense, impairment of cardiac nerve-tone, hallucinations, delirium, and insanity. Paralysis of certain centres are not uncommon, notably those for the legs and the sexual organs. Formication and exaggerated reflexes accompany those earlier stages wherein treatment is likely to be successful, and in every instance with which I have been familiar there have been pain and skin hyperæsthesia.

Sulphonal produces sleep, but does not relieve pain. Antipyrine and antifebrine disturbs the heart-action to a degree occasionally alarming, and, in a few cases, have caused temporary delirium. Chloralamide is better, but loses effect after lengthy administration. The various preparations of ether are too stimulating to circulatory centres, and choice seems to lie between such vegetable narcotics as hyoscyamine, hyoscin and the like, and phenacetin. In a few instances I did well with a combination of hyoscin and monobromide of camphor, but in a majority the phenol derivation has proved the best. Indeed, were it not for a peculiar quality which phenacetine possesses and sometimes brings into action, that of producing violent perspiration, it would be the ideal hypnotic and pain-

killer ; and with this defect, which I have usually been able to correct by combining it with quinine sulphate, in my opinion, phenacetine stands first in the list of remedies for relief of insomnia and pain in the permanent neuroses following grippe. No general dose can be given, but I consider the drug harmless in any quantity that is likely to be found necessary, and have given ten grains every two hours for two days with no bad result. Phenacetine may be combined with iron for long administrations.—*Internat. Med. Mag.*, Sept., 1892.

**Lee (M. H.) on The Local Use of Phenacetine.**—Lee has had the usual experience with the use of the remedy internally. He has been led to use it in the form of fine powder dusted on ulcerated surfaces, and reports gratifying results. Cases are related of syphilitic ulceration, compound comminuted fracture of the fingers made by a rip-saw, and incised wound of thumb and forearm followed by pyæmia.

In all of these cases, the usual remedies had been previously used without satisfaction. This small number of patients is inconclusive, but the remedy deserves a further trial.—*Memphis Med. Month.*, Oct., 1892.

**Cerne and Carter on Antipyrine, Phenacetine and Phenocoll.**—Observations on these remedies from laboratory experiments lead the writers to the following conclusions, as published in a recent number of *Notes on New Remedies* :

Antipyrine in small and moderate amounts produces a rise of the arterial pressure, this stimulating effect being due to an action upon the heart. The lowering of the pressure by large or toxic doses is due similarly to a depressant action of the drug upon the cardiac organ. The remedy does not seem to influence the vaso-motor system. Antipyrine causes an increase in the pulse-rate through paralysis of the cardio-inhibitory centres. The secondary decrease in the number of pulsations is of a purely cardiac origin, the drug exercising a depressant effect upon the heart itself. Antipyrine, in excessive doses only, changes the hæmoglobin of the blood into methæmoglobin.

Phenacetine in moderate doses causes a rise of the arterial pressure by acting upon the heart, and probably likewise by a stimulating influence exercised on the vaso-

motor system. The reduction of pressure by the drug in large amounts is mainly of a cardiac origin. The remedy increases in small doses the force of the heart by a direct action. Phenacetine increases the pulse-rate chiefly by cardiac stimulation, and possibly also by influencing the cardio-accelerating apparatus. The drug reduces the number of pulsations, especially in large quantities, primarily, by stimulating the cardio-inhibitory centres, and, later, by a depressant action upon the heart.

It was found that phenocoll, in ordinary amounts, has practically no effect upon the circulation. Large doses diminish the blood pressure by influencing the heart. Phenocoll reduces the pulse rate by stimulating the cardio-inhibitory centres. It then increases the rapidity of the pulse by paralyzing said centres. The final diminution is of cardiac origin. Upon the blood itself phenocoll has no action.

Regarding heat phenomena the following conclusions were drawn :

1. Antipyrine, phenacetine, and phenocoll all fail to produce any effect on the heat functions of the normal animal.

2. Antipyrine produces a decided fall of temperature in the first hour after its administration in the febrile animal. This reduction is due to a great increase in heat dissipation, together with a fall in the heat production.

3. Phenacetine, both in septic and albumose fevers, produces a very slight fall of temperature during the first and second hours after its ingestion by the stomach, but the greatest reduction occurs the third hour after its ingestion. The fall of temperature results chiefly from a decrease in heat production, with a slight increase in the heat dissipation. The increase in dissipation is not as great as with antipyrine. Probably the delayed action of the drug depends on its insolubility.

4. Phenocoll causes in fever a very decided fall in temperature, which occurs the first hour after the administration of the drug by the stomach. This reduction is the result of an enormous diminution of heat production, without any alteration of heat dissipation.—*Ed., N. Y. Med. Record*, Nov. 8th, 1892.

**Garrison (H. E.) on Antifebrine in Scarlet Fever.**—The writer has used the remedy in sixteen cases of this affection. She says : My conclusions from these cases are that antifebrine in scarlatina relieves

the disagreeable symptoms, as pain and restlessness, and makes the patient comfortable. It shortens the duration of the disease. All my patients have been out of doors in two weeks, and the majority in ten days, after the beginning of the fever. It prevents sequelæ. In no case after using the antifebrine have the patients had any nephritis. Before combining sodium bicarbonate with it I occasionally found a case where the urine was not voided sufficiently often, but since then I have had no trouble.

It is best to begin the treatment as early as possible, but it will also be of benefit later on. In my twelfth case the child had been under the care of another physician four days, and the parents said it was growing worse steadily. As the physician had not made his regular call, and they were out of medicine, I was called in while attending a case in the same locality. The temperature was 103° F.; pulse, 160. As the child felt so much better after taking the antifebrine, I was asked to take charge of the case. The second day the fever was controlled, and the child made a quick recovery.

The first dose of antifebrine, if sufficiently large, produces a feeling of rest, and the child lies quiet. My favorite way of administering it is to drop the powder into a tea-cup, and pour in sufficient boiling water to dissolve it. Then have the child take it in small sips, as hot as possible. In some cases I have used acetanilid pills, two and one half grains; but where the angina is severe the solution makes a soothing application to the throat. One of the benefits which I have frequently noted in my cases is the improvement in the quality of the pulse after the antifebrine is administered. Even where there is no lowering of the temperature, there is an increase of volume and lowering of the pulse-rate. I have attributed this to its effect upon the nervous system.

In what manner the beneficial results are obtained, whether they are wholly due to the antipyretic and sedative action, or whether there is some specific action on the scarlet-fever poison, my observations have not yet determined.—*N. Y. Med. Record*, Oct. 22, 1892.

**Styptic Colloid with Calomel or with Mercury Bichloride.**—In cases of phagedænic ulceration and of syphilitic sore styptic, colloid, as an application, goes

excellently with calomel. The combination can be made in one of two ways. The calomel can be lightly dusted over the ulcerated surface in an even layer, and the styptic can then be painted over the surface with a camel's-hair pencil; or the calomel can be well admixed with the colloid in the proportion of three grains to the fluid drachm of colloid, and a portion of the mixture can be painted over the affected part. In examples of ulcerated fauces from specific disease, the application of calomel in this manner performs a double service: it acts locally and by absorption, generally.

Mercury bichloride can, in like manner, be used in combination with styptic colloid in the proportion of one grain of the sublimate to two fluid ounces of the styptic. In the solution so formed there is sufficient alcohol to take up the sublimate, and there is no action on the tannin or collodion to cause precipitation. A few minims of this solution can be laid over an ulcerating or suppurating surface with a brush, or the solution can be applied on thin layers of cotton wool as a dressing that can be removed and renewed as required.—*Asclepiad*, No. 35, 1892.

**MacDonald (K. N.) on a Case Illustrating the Successful Treatment of Internal Hæmorrhoids by Chrysarobin.**—On July 9, 1892, D. M., aged sixty-one, was admitted into the Gesto Hospital suffering from bleeding hæmorrhoids. He seemed very feeble, anæmic and emaciated from loss of blood, tottering in his gait, and altogether he appeared a rather uncompromising-looking subject. His family history was good, and he himself enjoyed robust health up to about six years ago, when, in consequence of a fall from a scaffold, he felt some weakness of the spine for which he was treated in the Glasgow Royal Infirmary, but has ever since suffered more or less from atrophy and weakness of the lower extremities. His first attack of hæmorrhoids occurred two years ago, and in October, 1890, he had them ligatured, and made a good recovery at the time. His present attack commenced three months ago, and ever since then he has been losing more or less blood with almost every evacuation of the bowels, and the "lump" which came down he described as being as large as a hen's egg, which often took him fifteen minutes, and even half an hour or more, before he could return it into

the bowel. On the morning following his admission—a drachm of compound liquorice powder having been administered the night before—it was found that a mass of hæmorrhoids, fully as large as a Tangerine orange, occupied the cleft of the nates, from which arterial blood escaped on attempting reduction; but this was effected after free lubrication with carbolic oil. The proper line of treatment was clear enough—viz., to arrest the hemorrhage by surgical procedure; but, owing to the state of his general health and all the circumstances of the case, Dr. MacDonald resolved to temporize—holding everything in readiness in case of need—and endeavored to improve the general health by administering quinine and iron, with the application of cold and the usual styptics locally, suitable diet and regulation of the bowels, etc. Before resorting to more active measures it was decided to give a trial to Kossobudki's modification of Unna's treatment by chrysarobin; accordingly the following formula from Whitla's *Dictionary of Treatment*, was employed: One grain of chrysarobin, a quarter of a grain of iodoform, an eighth of a grain of extract of belladonna, thirty grains of cocoa butter, with a sufficiency of glycerine to form a suppository, one to be introduced daily. One was inserted on July 15th and the treatment continued daily until the 31st, when a large hemorrhage, followed by a little slough came away, since which date he has been practically cured. During the treatment there was a little hemorrhage on several occasions, but since the removal of the slough there has not been the slightest sign of hemorrhage, pain, or protrusion, and as far as can be seen the result is most satisfactory, even if the cure does not turn out to be permanent. No pain or discomfit was felt throughout, neither did the patient lie up entirely. He was allowed to sit up every afternoon, and, with the exception of a dose of compound liquorice powder every other night, no other treatment was considered necessary beyond what has already been stated, and he is now going about as well as he was before the attack came on, and is likely to continue so, regulation of the bowels being the only precaution practised.—*London Lancet*, Oct. 22, 1892.

**Sutherland (G. W.) on Salicylate of Soda in Chorea.**—F. S.—, a girl aged seven years, some months ago was seized with a well-marked attack of rheu-

matic fever, accompanied by endocarditis of the mitral valve. Under salicylate of soda the symptoms gradually disappeared, as they usually do, and the child became convalescent. Three days afterwards she was regarded as well, and while the salicylate of soda treatment was being continued as a precaution against relapse symptoms of chorea developed, beginning in the left hand and arm, and rapidly spreading so as to involve the whole muscular system. The patient could not sit upright, and had to be restrained in bed. There was also well-marked mental symptoms. Salicylate of soda seemed if anything to increase the disorder, and I then had recourse to arsenic, rapidly increasing the dose until fifty minims of the liquor arsenicalis were taken per diem. This amount was well tolerated. In a few days there was marked improvement, and in four weeks' time no signs of chorea could be detected.

I have mentioned this case because the chorea developed while the patient was under salicylate of sodium, and after this remedy had removed the symptoms of rheumatic fever. It would be interesting to know whether the salicylate treatment of rheumatic fever has had any influence on the number of cases of chorea immediately following the fever.—*London Lancet*, Oct. 15, 1892.

**Graham (E. E.) on the Treatment of Pulmonary Tuberculosis by Creosote.**—The following tables show the results obtained in the out-patient department of the Jefferson Hospital and private practice. Those patients who are considered in the first stage of the disease presented evidence of an isolated deposition of tubercle. Those in the second stage include all cases where the tubercular deposit was well marked. The third stage comprises those cases where softening, breaking down, and cavities were manifest. Temporary improvement in both tables applies to those individuals who were under observation for a period of three to six weeks. Continuous improvement, to cases treated for a longer period, many having taken the remedy for months. Apparently cured, to patients who *considered themselves* well, and in whom the symptoms of tuberculosis had disappeared, tubercle bacilli were no longer found in the sputum, and the physical signs showed a full expansion of the chest, a clear percussion-rate, no increase of vocal fremitus,

and breath sounds, which, while perhaps slightly harsh, still largely preserved their vesicular character. No improvement, signifies a steady progress of the pulmonary affection. As none of the out-patient cases were admitted to the hospital, the percentage of deaths could, of course, not be calculated in the dispensary cases.

## DISPENSARY CASES.

	Temporary Im- provement.	Continuous Im- provement.	No Improve- ment.	Apparently Cured.	Total.
First stage.....	75	30	2	12	119
Second stage...	31	14	15	0	60
Third stage...	6	0	9	0	15
Total.....	112	44	26	12	194

## PRIVATE CASES.

	Temporary Im- provement.	Continuous Im- provement.	No Permanent Improvement.	Apparently Cured.	Died.	Total.
First stage....	1	4	2	11	1	19
Second stage..	2	5	3	0	0	10
Third stage..	0	0	3	0	4	7
Total.....	3	9	8	11	5	36

—*Therap. Gazette*, Oct. 15, 1892.

**Spendlove (F. M. R.) on Treatment of Diseases of the Respiratory Organs by Butcher's Direct Contact Method.**—In Butcher's direct contact method the nascent vapor of ammonium chloride is used as a *vehicle* for carrying the drugs to the affected surfaces; not as a *medicament* itself, as with other ammonium-chloride inhalers. It is important to note this distinction.

The medicine to be inhaled is put in the large bottle; a few drops of strong solution of ammonia are added. The small bottle or vial inserted in the cap of the inhaler is filled nearly full of chemically pure hydro-

chloric acid. To operate the inhaler: Remove the corks; slightly raise the long tube, turn it round and introduce the end into the neck of the small vial, about half an inch from the acid; place the nozzle at the end of the rubber tube in the mouth or nostril, and take a full inspiration, then remove the nozzle—when using the mixture for catarrh allow the vapor to pass out through the nostrils; when using for bronchial or pulmonary disease, retain the vapor in the lungs. Great care should be taken that the tube does not touch the acid, and also not to blow through the rubber tube into the inhaler. In the former more ammonia must be added to the mixture; in the latter the acid vial must be emptied and refilled with new acid.

## PRINCIPLE OF ACTION.

On inhaling, the air passes across the acid, becoming charged with its fumes, thence down the glass tube into the inhaler, immediately uniting with the ammonia in the mixture, forming the vaporous crystals of ammonium chloride; the crystals so formed pass upwards through the mixture, becoming coated with the drugs therein suspended, and then pass through the inhaling-tube into the air-passages. The drugs must be so mixed as to remain in suspension; if precipitated they are beyond the reach of the vapor.

The inhaled vapor, as it passes to the lungs, consists of the minute crystals of ammonium chloride, covered with the medicines suspended in the mixture through which they have passed; the crystals acting as a *solid vehicle* for carrying the medicinal substances to the entire respiratory tract. That the drugs are really carried there by the crystals in measurable quantities, may be proven:

1st. *Chemically.* In filling the empty inhaler bottle half-full of distilled water, add a few grains of magnesium sulphate, also a few drops of a strong solution of ammonia; adjust the glass tube as directed, and inhale; then blow each inhalation through a glass tube the lower end of which rests at the bottom of a tumbler of distilled water. Repeat the process for a few times; then test the water in the tumbler for magnesium sulphate by adding a test solution of baric chloride. An abundant white precipitate of baric sulphate will demonstrate the introduction into the air-passages of the

substances contained in the inhaler through which the vapor passed.

2d. *Microscopically.* Add a few grains of any salt whose crystals are easily recognizable under the microscope, to the water in the inhaler; inhale as before; blow the exhaled vapor upon a piece of white paper covered with a thin layer of moist mucilage, and examined under the microscope; the crystals of the drug will be seen in great numbers. These crystals can also be recognized in the sputum brought up from the bronchi, the vapor having been allowed to remain in the lungs instead of being exhaled.

3d. *Physiologically.* Add to the distilled water in the inhaler any drug foreign to the body, the time and channels of elimination of which are well known; inhale for a few minutes; afterwards test with the proper reagents the secretions through which the drug is eliminated.—*Medical Age*, Sept. 26, 1892.

**Manson (P.) on the Treatment of Filaria Sanguinis Hominis.**—The filaria stands to chyluria very much in the same relationship as rheumatic fever stands to heart disease and gonorrhœa to urethral stricture; it starts the disease process, but its constant presence is not necessary for keeping it up. To attempt, therefore, to cure chyluria by trying to kill the filaria is as illogical and as useless a proceeding as to attempt to cure established heart disease by salicylates or stricture of the urethra by astringent injections. This is evident if we consider the order of events in the production of chyluria. This is as follows: A parent filaria is lodged in the thoracic duct. In some way not yet understood it injures the walls of the vessel, causing ulceration or inflammatory thickening. In time this lesion leads to stenosis of the duct. *Pari passu* with the development of the stenosis the thoracic duct on the distal side of the stricture dilates, owing to the rising excentric pressure from accumulating contents. After a time the stricture becomes so narrow that the lymph and chyle no longer find their way past it to the left subclavian vein. They seek, however, to reach the blood by another route; a retrograde movement down the thoracic duct sets in, and so, travelling by way of the pelvic lymphatics, the lymphatics in the walls of the abdomen, and the anastomosis between these and the lymphatics of the upper part of the body, the chyle from the intestines

and the lymph from the lower extremities find their way into the circulation. Possibly there are other routes, as by the lymphatics of the œsophagus, diaphragm and back; it is certain, however, that a common course pursued is that described, which is very much the same as that pursued by the blood in the case of obstructed portal circulation. To accommodate this increased and diverted chyle and lymph circulation the lymphatics by which it passes become enlarged and in many places varicose. The tendency to varicosity is very evident in such places as the scrotum, mucous membrane of the bladder or wherever the lymphatics are abundant and feebly supported. Now if the lymphatics of the bladder happen to be involved in the compensatory anastomosis, and if they give way, as the lymphatics of the scrotum so frequently do in similar circumstances, the result is a leakage of chyle into the bladder and chyluria. Manson holds that once established in the human body the filaria should be left alone, protected rather than persecuted. Pathology indicates that the proper treatment of chyluria is in principle the same as the treatment of acquired varix in any inaccessible region. This should be rest, elevation, lowering of the tension in the lymphatic vessels by the use of saline purgatives, limited and appropriate food, abstinence from fluids as much as possible. Certain drugs have been vaunted as specifics for chyluria; he has tried several of them, but never with success of a permanent character. Temporary recovery from time to time is the rule in chyluria, and the drug which was being used at the time the urine cleared spontaneously from healing of the rupture in the varix in the bladder is often credited with the cure. He cannot understand how a drug introduced by the mouth can possibly cause the closure of a gaping varix in the bladder.—*London Lancet*, Oct. 1st.

**Gibson (G. A.) on the Antiseptic Treatment of Pernicious Anæmia.**—The writer briefly sums up the results of Hunter's observations on the nature of this disease, and reports two cases treated with  $\beta$ -naphthol. The first was a male, aged fifty-five years, in whom the red cells of the blood numbered only 800,000 per cubic millimetre.

Changes in size and shape of the red corpuscles were very obvious, but there was no absolute change in the number of

the leucocytes. The spleen and lymphatic glands were of normal size. In regard to the respiratory system, there was a history of frequent attacks of epistaxis. There was no change in the fundus oculi. The urine was pale, and no changes of importance were present in it. The temperature was never at any time abnormal.

Arsenic and iron gave no satisfactory results, and the patient's condition became so reduced that it was necessary to resort to transfusion. It was then decided to follow Hunter's suggestion, viz., to first feed the patient with artificially digested food, and then begin the use of the naphthol in pills of two grains three times a day. The further history was one of gradual improvement, and at the last examination the cells had increased to 2,320,000 per *cm*. The patient had had considerable œdema, and soon after the naphthol was begun an obstinate diarrhoea set in, lasting several weeks.

One point of great interest was that during the period of diarrhoea the red corpuscles were doubled. No doubt the drain of fluid from the patient's alimentary tract would not only remove œdema, but would also relatively increase the red corpuscles. It may possibly be held that the doubling of the corpuscles was simply caused in this way, but it is hardly possible that so noteworthy a change in their number could be thus produced; and Gibson is much more inclined to believe that the explanation must be sought in an antiseptic action on the alimentary canal, coincident with the diarrhoea.

The second case was that of a girl, aged twenty, in whom a diagnosis of simple anæmia was made. Naphthol was given as before. The cells rose in two months from 1,950,000 to 3,200,000 per *cm*.

Gibson inclines to a belief in the theory of Bunge, which is that the reason why iron is of unquestionable effect in almost every form of anæmia is that such iron as is given medicinally seizes certain unknown poisons formed in the alimentary canal, and prevents them from acting upon the iron contained in the food and rendering it inert.

In order to obviate the irritation sometimes caused by the  $\beta$ -naphthol, it has been found advisable to combine it with some bismuth preparation.—*Edinburgh Medical Journal*, Oct., 1892.

**Price (O. J.) on Varicose Veins of the Lower Extremities.**—Occlusion and coagulation have been found to be

open to the danger of phlebitis and progressive thrombosis, as well as the likelihood of a recurrence of the trouble by dilatation of the anastomosing branches; while extirpation would appear to be the more practical and legitimate method.

I have performed the latter operation several times, both in the removal of the internal and the external saphenous veins, and in all cases, with gratifying results.

No untoward consequences have occurred, and the benefits have seemed to be substantial and permanent.

In operations of this kind I regard as of the first consequence a strict insistence upon aseptic precaution, as much so as for a case of laparotomy; and the selection of a reliable quality of catgut for the ligatures, but a fine quality of silk would do. The part to be operated upon should be prepared by the usual antiseptic application for two days previous.

Having applied the constrictor above and only moderately tight, the incision is made as nearly longitudinally as possible to the varix and the veins exposed by careful dissection.

The proximal and distal ends should be well secured by catgut or silk ligature, and all the branches ligated, when the varix is removed entire. Sometimes the whole length is implicated, but, as will be more frequently the case, the removal will be confined to parts here and there; the intervening portions being normal, and this may apply to the branches as well as the main trunk.

In suturing the skin after the operation it is well to bear in mind that the cutis in immediate relation to varicose veins is of a very unreliable character, and should be subjected to as little tension as possible, especially so, if the dissection has embraced a considerable surface.—*Chicago Clin. Review*, Oct., 1892.

**Tower-Smith (W.) on the Dietetic Treatment of Obesity.**—A diet administered for whatever purpose should be effective of that purpose; it should also be agreeable to the palate. Of this I shall speak later. If it involves restriction this should be as easy as the object in view will permit, and the period of privation should be the shortest possible. Interminable privation is an absolute bar. Another requisite for a satisfactory diet is that it should be—and should be known to be—wholesome and safe. There must be no fear lest in



combating a remote danger we induce another which is worse or more immediate. If such a danger exists it is a disqualification. If there is any doubt about it the case is nearly as bad, since medical authority will very properly decline to give its sanction to a mode of treatment which is questionable in this respect.

Smith has notes of one thousand and ninety cases in which a diet of purely nitrogenous food was administered for a considerable period in each case. In his view amongst those cases were representatives of every class of life ; and it has been his invariable experience, as it is to those who have worked with him, that concurrently with the rapid loss of weight there was improved nutrition, health, and vigor, with a general sense of well-being to which the subjects had in many instances long been strangers.

In his view the essential proviso for the safe administration of nitrogenous food alone is its dilution with copious potatoes. This point attended to, all danger vanishes. The liver and kidneys are enabled to discharge their functions without embarrassment.

Smith gives the following practical tables :

#### DIET FOR AN EXTREME CASE.

##### 1st Period, 14 Days.

*Breakfast.*—Tea or coffee, with saccharin if desired in lieu of sugar ; bread or bis-

cuits made from soya bean, 2 oz. ; grilled white fish or red meat, kidneys.

*Lunch.*—Cut from joint of beef or mutton, taking no fat, and one helping of green vegetables, avoiding only peas, beans, and all roots ; soya bread or biscuit, 1 oz.

*Dinner.*—Clear soup, white fish, red meat, green vegetables as lunch ; soya bread or biscuit, 1 oz.

##### *Drink.*

*First thing on waking.*—Tumbler of hot water with slice of lemon.

11 A.M.—Cup of bovril or clear soup.

*Lunch.*—Two glasses of claret or 1 oz. of whiskey with potash water.

5 P.M.—Cup of bovril or clear soup.

*Dinner.*—Two glasses of still hock or claret, or whiskey or potash.

*Bedtime.*—Cup of bovril or clear soup.

Mustard, pepper, salt, Harvey's sauce, may be taken.

##### 2d Period, 21 Days.

*Additions to No. 1.*—Oysters, tongue, stewed fruit, with saccharin ; poultry, game.

##### 3d Period, 31 Days.

*Additions to No. 2.*—Toast in place of soya bread, for each meal, 2 oz., savory jellies, aspic of prawns, plovers' eggs, jelly.

*Dessert.*—A small quantity of fruit ; blue-mould Dorset cheese.—*Edinburgh Medical Journal*, Oct., 1892.

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

BY ALEXANDER H. TRAVIS, M.D.

**Shakespeare (E. O.) on Preventive Measures against Cholera.**—The author urges the importance of unusual watchfulness for all cases of bowel disturbance, especially for attacks of so-called cholera morbus, particularly when occurring in the immigrant classes. Such attacks should be regarded with suspicion until their nature has been determined. Preventive measures may be crystallized in four words : *prompt isolation, thorough disinfection.* The patients' clothing and soiled bed-linen should be disinfected by steam, or boiling, or by thoroughly soaking for an hour or more in a large quantity of a strong solution of carbolic acid, or chloride of lime, one part to twenty. The mouth, hands, and anus of the patient should, im-

mediately after an evacuation, be washed with a disinfectant. Attendants' hands should also be disinfected after handling the patient. Under no circumstances should any one eat in the same room with the sick ; no person who has come in contact with the sick should eat without previous disinfection of the hands.

The well should studiously avoid all causes of disturbance of the functions of the stomach and intestines ; irregularities of personal habits, intemperance in eating or drinking, indigestible food, exhaustion, mental emotion, exposure to draught, etc. Imbibition of water or other fluids between meals should be avoided, if, for no other reason, because the reaction of the gastric juice is then neutral or even slightly alka-

line. Care in the preparation of food is important; milk and water should be boiled thoroughly and shortly before use. All food should be thoroughly cooked; salads and raw food, except ripe, clean fruit, should be forbidden. Culinary utensils and table-ware should be scrupulously cleaned with boiling water. The hygienic condition of the dwelling and its surroundings should be as nearly perfect as possible. The supply for drinking-water should be scrupulously guarded from contamination of any kind. Disturbances of the alimentary canal should be promptly remedied. Absolute rest in bed, abstinence from food, an emetic, if undigested food is present in the stomach, small doses of opium salol, naphthaline, or analogous compounds, if there be visible peristalsis of the intestines, or diarrhoea. All inmates of the infected dwelling and all persons in close communication with it should be isolated and kept under strict surveillance until the extreme limit of the period of incubation (five or ten days) has elapsed, counting from the commencement of surveillance.—*Med. News*, Sept. 17, 1892.

**Cantani (A.) on the Treatment of Cholera.**—In a long and interesting paper Cantani describes the treatment employed by him during the epidemic of cholera in Naples during 1884. The great danger in cholera lies in two conditions: an acute chemical intoxication in consequence of the absorption of choleraic poisons produced by the comma bacillus, and in extreme inspissation of the blood secondary to the profuse discharges from the lesions of the alimentary canal, caused by the same bacillus. The relative intensity of these two factors varies in different cases. From these considerations are drawn four clear and rational therapeutic indications: 1.—To restrict the growth of the bacilli in the intestine. 2.—To render the chemical, choleraic poisons in the intestinal canal innocuous. 3.—To promote excretion of the poisons already absorbed. 4.—To remedy the inspissation of the blood. Besides these chief indications there are other more or less sympathetic indications, such as the supply of warmth to the cooling body of the patient, and stimulation of the heart and circulatory and nervous systems.

In the stage of invasion, the first two indications are to be met as quickly and as thoroughly as possible. The author's large experience has convinced him that there is,

as yet at least, no better and no simpler or more certain way of doing this than by high enemata of hot solutions of tannic acid. The enteroclysm employed by the author consists of from five to twenty gms. of tannic acid dissolved in one and a half to two litres of water or chamomile infusion, to which laudanum is usually added, and sometimes thirty to fifty gms. of gum arabic. The temperature of this enema is always hot, 100° to 104° F., tending to give warmth to the patient rather than withdraw it, and to stimulate the heart and circulatory apparatus. Of 213 cases treated with these enemata in the early stage by the author and Dr. Vitone, all recovered. Professor Angyan used the tannic acid enemata during 1886 in the Budapest Cholera Hospital in

76	cases with choleraic diarrhoea, recovered,	76
85	" of cholerae . . . . .	85
90	" in algid stage . . . . .	58
211	" " stage of severe asphyxia, "	44

As the results are more rapid and certain the earlier the use of the enemata is begun the author advises their employment at once, without loss of time in trying other remedies, or, when that is impossible, to begin their use if the usual measures for provoking reaction of the skin—rest in bed, warm covering, hot drinks with spirits, a little laudanum—do not at once put a stop to the diarrhoea. The enema should be repeated immediately after each discharge from the bowels—about every three or four hours, or oftener, according to the severity of the case—and should be retained as long as possible. If made immediately after the first or second premonitory passage, one, or, at most, three or four injections will suffice. If the patient passes into the algid stage they should still be continued. No internal medication is allowed, except a little water frequently administered, and ice-pills, and a little good wine, or lemonade and brandy.

The two last indications are most pressing in the second—algid—stage, and can only be met by the introduction of large quantities of water into the blood and tissues. The author prefers subcutaneous infusion to intravenous and intraperitoneal and intrapleural injections, and employs a solution of sodium chloride four gms. and sodium carbonate three gms. in one litre of sterilized water at 102° to 104° F. Usually one litre of this solution was injected beneath the skin in two places simultane-

ously (one half litre in each place). Unless used too late it was absorbed with surprising rapidity, often without massage, and was in no instance followed by injurious results. The immediate effect on the patient was often remarkable; the symptoms of stagnation of the blood quickly passed away, the pulse reappeared, diuresis returned, cyanosis diminished, the surfaces of the body became warmer—unless the injection was given too late. Sometimes recovery followed, sometimes the signs of collapse returned. Of 187 severe cases treated by this method 61 per cent. recovered, 39 per cent. died. The best time for beginning hypodermoclysis is the beginning of the algid stage; it is best practised in the ileocostal, lumbar, interscapular or gluteal regions, preferably in the ileocostal regions with the free end of the cannula toward the abdomen. The neck region should be avoided, as there is danger of suffocation.

In the stage of reaction, besides therapeutic indications arising from local lesions, the excretion of excrementitious and poisonous products of tissue-changes should be favored by the continued administration of water; by the mouth in small quantities if the stomach will retain it; by the continued use of enemata; of tannic acid if diarrhoea continues, otherwise of hydrochloric acid three or five parts to one thousand parts water or of sodium chloride, ten or fifteen parts to one thousand parts of water. When the symptoms of reaction are severe, warm salt-water hypodermoclysis is advised for the purpose of more rapidly washing out the entire body.—*Berliner klin. Wochenschr.*, September 12, 1892.

**Kiemperer (G.) on Artificial Immunity to Cholera.**—K. reports briefly his experiments on the production of immunity to cholera on lower animals. Intraperitoneal injections of 1 ccm. of a culture of cholera bacilli which had been kept three days at a temperature of 40.5° C., were borne without visible illness. Twenty-four hours later the injection was repeated; on each of the two following days 1.5 ccm. was injected. The animals so treated survived injections on the fifth day of an otherwise lethal dose. Guinea-pigs treated in the same manner with cultures which had been kept at 70° C. for two hours, also survive the lethal dose. Other animals that received a single intraperitoneal injection

of the culture which had been kept for two hours at 70° C., survived a lethal injection two days later; it was determined that seventeen hours after the inoculation immunity existed. Cultures which had been kept two hours at 60°, 65°, or a temperature over 70° C., conferred a less degree of protection.

Rabbits which received intravenous injections of less than the lethal amount of the culture which had been kept two hours at 70° were, after recovery from the resulting illness, found to be protected against the otherwise lethal dose. The best results were obtained by injecting 3 ccm. of this culture four times at intervals of two days. Three days after the last injection, immunity is present. Serum of an immune rabbit confers immunity on a guinea-pig when injected into the peritoneum. Protection was more certain if the inoculation was made three hours before injection. If the inoculation was made at the same time or after injection death was postponed but not prevented.

The author is inclined to believe that the introduction of cholera cultures into the stomachs of guinea-pigs produces intoxication, and not, as in man, infection. It was possible to produce the symptoms with cultures in which the bacilli were certainly dead. The intoxication produced by cholera bacilla in the intestines has, however, a closer resemblance to cholera in man, than that resulting from the intraperitoneal injection; it was therefore determined to test the immunity obtained as described against the intestinal intoxication. It was ascertained that the above described injections conferred protection against the intoxication resulting from the presence of cholera bacilli in the digestive tract; but a higher degree of immunity was necessary than was requisite for protection against intraperitoneal intoxication. Two intraperitoneal inoculations of 2.5 ccm. of the heated culture at an interval of twenty-four hours produced immunity, twenty-four hours after the last inoculation. Two inoculations of 2 ccm. of serum of the immune rabbit at an interval of twelve hours, produced immunity twelve hours later.

Guinea-pigs into whose stomachs quantities of the culture of cholera bacilla less than the lethal amount were introduced, survived lethal quantities given in the same way several days later.

Cultures, through which a constant electrical current of 20 milliampères, had been passed for twenty-four hours, conferred the same immunity as that obtained with the cultures kept at 70° C. for two hours.

—*Berliner klin. Wochenschr.*, No. 32, 1892.

#### Kornfeld (F.) on Critical Œdema of the Lungs in Croupous Pneumonia.

—Few cases have been reported of œdema of the lungs occurring at the critical period in lobar pneumonia terminating in recovery. The following case is interesting: The patient, a man thirty-seven years of age, strong, alcoholic, presented symptoms of general disturbance and high fever. There was a pneumonia area in the right infra-spinous region. An extensive herpes appeared on the lips and hard and soft palate and right cheek. In pronounced contrast with the marked prostration of the patient, his cyanosis, and occasional delirium, was the good tension of the pulse. The area of consolidation spread over almost the entire right lung and a large part of the lower lobe of the left lung. On the seventh day the symptoms of crisis appeared; temperature 39.8° C., delirium, (stertorous respiration,) cyanosis, profuse perspiration. Besides, there was very evident œdema of the lungs, as shown by abundant moist râles all over the lungs. Notwithstanding these symptoms of collapse, the tension of the pulse continued good, the heart action strong and one hundred to the minute. Three hours later these symptoms had improved. Improvement continued and on the twenty-first day the patient had thoroughly recovered.

Kahane has reported two cases of per-acute transitory œdema of the lungs at the pneumonic crisis. In the midst of symptoms of profound collapse in consequence of increasing heart weakness, moist râles developed under the ear of the observer, and after a few seconds, as rapidly disappeared. In both cases the heart failure was temporary and recovery followed. Müller has described one case of so-called acute paroxysmal, angio-neurotic œdema of the lungs. The patient who had an old heart lesion, suffered during many years from attacks of œdema of the lungs recurring at intervals of months or years in the midst of good health. The attacks were not accompanied by weakness of the heart, and they are regarded by Müller as angio-neurotic phenomena. — *Centralblatt f. klin. Medicin*, Sept. 17, 1892.

**Smith (A. H.) on Pneumonia.** — Cases of pneumonia may be grouped at the bedside into three divisions.

1. Cases with few evidences of general infection, and the local lesion the prominent factor. The lung may be largely implicated, but prostration is moderate or absent, and the heart action is strong and the urine is free from albumen. In such cases there is little necessity for treatment; an expectant treatment with proper alimentation will meet the demands of the case; at the outset, local remedies, sinapisms, dry cupping, etc., may be needed to relieve pain.

2. Cases with severe general infection, with comparatively little implication of the lung. Illustrated by the case of a man thirty-five years of age, of fairly good previous health, with consolidation of upper half of right lung, marked prostration, delirium, rapid and weak heart action, and albuminous urine. Muscular weakness extends to the heart and the object of treatment is to keep up the cardiac action. These cases are most apt to prove fatal during the stage of high temperature. After defervescence the prognosis is more favorable. Early use of alcoholic stimulants is required in these cases. It lowers arterial tensions. Ammonium carbonate is indicated. The cardiac tonics stimulate but supply nothing directly to the heart, and should not be pushed. Digitalis should not be employed except in combination with nitroglycerine, sodium nitrate, aconite or other drug which has the power of relaxing arterioles. The action of digitalis in lengthening the systole favors the nutrition of the heart. Strychnine is a valuable temporary stimulant. A combination of digitaline, strychnine, and aconitine may be given, the first in the dose of one sixtieth of a grain, the two latter in the dose of one one-hundred-and-twentieth of a grain may be given every hour, until the frequency of the pulse is reduced to about one hundred by the digitalis, while the aconitine acting on the heat-producing and vaso-motor centres lowers the temperature to about 101°. When the temperature remains high the external use of cold is often beneficial.

3. Pulmonary and circulatory conditions which are secondary, and which constitute the principal factor. The illustration was an alcoholic subject, sixty years of age, with difficulty of respiration a prominent factor, cyanosis, small area of consolidation,

œdema more or less pronounced throughout the lungs: the right chambers of the heart distended, the second pulmonary sound very feeble, with signs of general venous repletion. The danger lies in the impairment of the circulatory mechanism. The pulse does not show the gravity of these cases, for it is not failure of the heart as a whole, but of the right heart which is to be feared. Diminished clearness of the pulmonary second sound implies either diminished resistance in the pulmonary vessels or diminished power in right ventricle: which can be determined by the patient's general condition and by the condition of the respiration. Treatment must be directed to sustaining the power of the right heart and diminishing pulmonary resistance. Venesection naturally suggests itself. But a similar result is obtained by dilating the arteries by the use of vasomotor depressants. A good plan is to give sodium nitrite every two hours supplemented with nitroglycerine. Digitalis is contradicted unless the heart rhythm is deranged. Alcohol is important in these cases. Oxygen is valuable. An excess of nourishment should be avoided.

The features of the last two groups of cases may be combined; only patients with exceptional vitality recover.—*International Med. Mag.*, July, 1892.

**Gairdner (W. T.) on Dyspnœa and its Treatment by Drugs.**—Dyspnœa is the name not of a disease or of a symptom, but rather of a group of symptoms differing greatly, and almost indefinitely, in different cases. However arising, it is manifested in three distinct ways: (a) By the presence of a peculiar sensation, the *besoin de respirer* in an abnormal sense; (b) by a chemical change in the blood corpuscles which in its higher degree constitutes cyanosis; (c) by increased activity of the respiratory reflexes, and consequently of the respiratory movements. Not infrequently these phenomena co-exist, but not necessarily in an equal or proportionate degree. Marked idiosyncrasies are noted, in health and disease, as regards "shortness of breath." As the apparent symptomatology differs, so must, in some degree, the therapeutic indications. Furthermore the cause of the dyspnœa goes for much in respect to therapeutics.

1. Dyspnœa due to hæmatic causes; as in anæmia, especially pernicious anæmia. Here the indication is to restore hæmoglob-

in to the corpuscles and increase their number. Iron, arsenic, careful regulation of the hygienic conditions of the bowels, of the food, and of exercise constitute the treatment.

2. Dyspnœa due to pulmonary causes. The typical case is bronchitis with emphysema. Inhalation of oxygen may palliate, and is probably of benefit in some cases, but the one indication is to remove the obstruction to the passage of the air through the smaller bronchial tubes into the air cells. This is accomplished by the use of expectorant remedies. In another quite distinct group of cases of dyspnœa of pulmonic origin, the type of which is lobar pneumonia, the obstruction is not on the way to the air vessel, but in the air vessel. Expectorants are here only of use in as far as they keep clear the avenues to such parts of the lungs as are still capable of admitting air; in this way they may be valuable, though not the essence of the treatment. In all cases of dyspnœa of pulmonary or bronchial origin, opium must be used with great caution, though there may be cases in which it might be used. In the treatment of dyspnœa due to obstruction in the upper air passages, drugs are, in many cases, subordinate to surgical measures.

3. The third group contains all the cases in which the initial lesion is not within the air passages or cells; cardiac dyspnœa, dyspnœa depending on dropsical effusions of all kinds, including œdema of the lung tissue; uræmic dyspnœa occupying a doubtful position on account of its doubtful pathology. The removal of the cause is the essential therapeutic point; strengthening the heart, removing fluid or obstacles to the circulation of the blood. In the great majority of cases in this group, if the urgency of the symptoms will allow of elimination by the kidneys, it is as a rule best to employ active diuretics, especially the saline diuretics. When the kidneys refuse to act, it is better to produce diaphoresis than to use the drastic cathartics. But the diaphoretic treatment cannot be employed in the most grave cases, and in these cases jaborandi or pilocarpine is of the highest value; to be used with some caution, because in some cases, particularly of cardiac dyspnœa, it might produce incidentally too much prostration. Venesection is applicable in some of these cases in a higher degree than any other remedy.—*British Med. Journal*, Aug. 6, 1892.

**Trudeau (E. L.) on Experiments with Tuberculin.**—The experiments were undertaken with a view to obtaining evidence—first, as to the curative effect of Koch's tuberculin upon guinea-pigs inoculated with tubercle bacilli; second, as to the curative value and dangers in experimental tuberculosis of the modifications of tuberculin proposed by Hunter. The attempt was also made by a few simple experiments, to determine in which part of liquid cultures of the tubercle-bacillus the remedial elements resides—whether in the bacterio-protein of which the bacilli are composed, or in the albumoses and soluble toxins produced in artificial culture-media as the result of their life-history.

The author draws the following conclusions from the results he observed :

1. Koch's tuberculin does not cure experimental tuberculosis in the guinea-pig, although its specific influence on the primary lesions is indisputable.

2. Hunter's modification, CB, contains less of the remedial principle than tuberculin, and is apparently quite as dangerous.

3. Hunter's modification, B, is as efficacious as tuberculin, and free from some of its dangers.

4. Solutions obtained as described from well-washed tubercle bacilli have, when extracted with 50 per cent. glycerine and water, an injurious effect; when treated with hot alcohol, a doubtful and, at best, feeble remedial influence over experimental tuberculosis.

- 5.—They produce suppuration and serious constitutional impairment, which may result in organic disease and death.

- 6.—The liquid culture-medium in which tubercle bacilli have developed, but from which they have been removed by filtration, contains the elements that bring about reaction and cure in tuberculous tissue.

- 7.—Experimental tuberculosis in the rabbit's eye can be cured by injections of the filtered culture-medium.

- 8.—The permanency of such a cure has not yet been established.—*Med. News*, Sept. 3, 1892.

**Trudeau (E. L.) on Tuberculin and its Modifications.**—Thirteen patients were treated at the Adirondack Cottage Sanitarium with Koch's tuberculin for an average period of eleven months. The longest treatment was carried on for eighteen months; the shortest for four. The doses employed were usually small;

constitutional disturbance, as indicated by a temperature above 100° F., being avoided if possible. The results, even in selected cases, were, on the whole, but little better than are usually obtained by the climatic and out-of-door plan alone. They illustrate, however, that in cases in which the nutrition is constantly maintained at a high standard, more can be expected of tuberculin than in those in which the reverse holds good. The improvement that almost invariably follows the injections in apyretic cases does not seem to be continuous, but ceases before a cure is effected. The dangers incident to the injection are undoubtedly lessened by the use at first of small doses, by close supervision of the invalid's habits, and by good climate and hygienic surroundings. They are, nevertheless, real, and some of the complications observed seem to have resulted from the treatment. Nevertheless, the author's impression was that in many cases, for a time at least, a distinct and specifically beneficial effect was produced, not so much on the general condition of the patient as on the malady itself; unfortunately, the cases most suitable for this treatment are precisely those on which recovery may be hoped for under the more tedious but much safer climatic and out-of-door plan. The dangers of tuberculin and its uncertainty of action seemed to outweigh its curative influence, and until further research has opened up the way to safer treatment by this method, sole dependence must still be placed on a favorable environment and improvement of nutrition.

Ten patients were treated at the Sanitarium with injections of Hunter's modification B, the longest period during which the treatment was continuously administered being six months; the shortest three weeks, the average about five months. Four cases, classed as incipient, were apparently cured, the bacillus having disappeared from the expectoration of all, although in the scanty sputum of one were still a few elastic fibres. Of three advanced cases the disease was arrested in one; one was improved, one was unimproved. In three far advanced, one was improved and two were unimproved. These results are certainly encouraging, and are better than are usually obtained by climatic and hygienic treatment alone; and the disappearance of the bacillus, even though it should prove to be temporary, is a fact of some

significance. No general reaction at all took place in apyretic cases; and the local reaction was less marked than after injections of tuberculin. The latter was, nevertheless, very perceptible, and the change brought about in the diseased areas were the same as occur more slowly during the spontaneous arrest and cure of the tuberculous lesions by natural methods. Without drawing any conclusion from this limited experience the author records that he was favorably impressed with the freedom from ordinary complications and with the excellent results produced in so short a time by injection of this modified tuberculin. Specific medication is best applied in conjunction with climatic and hygienic measures, and at present its limitation to early and nearly apyretic cases seems indicated.—*Med. News*, Sept. 10, 1892.

**Jacobasch (H.) on Statistics of Pulmonary Tuberculosis.**—The statistics are taken from 500 consecutive cases of pulmonary tuberculosis treated by the writer at St. Andreasberg, in the Hartz Mountains, in the years 1884–90. In 26.5 per cent. of 475 cases one or both parents was tuberculous; 11.8 per cent. of the children of patients were tuberculous. In 13 instances infection from husband to wife or *vice versa* was highly probable. Fifty-nine per cent. of the cases were male, 41 per cent. female. Fifty per cent. of the cases occurred between the ages of 20 and 30. Between the age of 15 and 20 the percentage of cases was nearly twice as great among males as females. The duration of the disease is proportional to the patient's age and is longer in males than in females, averaging 4 years 5 months in the former, 3 years 9 months in the latter. Chill was given as the cause in 33 cases. In 28 cases the disease followed a pleurisy, and in them the mortality was 43 per cent., while in 19 cases in which the disease developed after pneumonia, the mortality was but 2.2 per cent. Hæmoptysis was the first symptom noted in 33 cases (32 of whom were males); in 13 of them it occurred without apparent cause; probably cases of previously latent tuberculosis; in some of the remaining cases the hæmoptysis may be regarded as the cause of the disease, as in 12 cases where it followed excessive bodily exercise by apparently healthy persons. Hæmoptysis was noted in the course of the disease in 35.6 per cent. of the cases. The mortality in these

cases has been but 0.8 per cent. greater than in the other cases. Rectal fistulæ were noted in 9 cases, in 2 of which they had existed a long time before other symptoms. The etiological influence of frequent child-birth, severe puerperal disease and prolonged nursing is illustrated. In 43.8 per cent. of cases of catarrh of the apex, tubercle bacilli were found in the sputum. The lower lobe was primarily affected in 11 cases. At the end of treatment, the duration of which varies considerably, 92.6 per cent. were undoubtedly improved; 2.6 per cent. remained about the same, 1.8 per cent. grew worse; and 3 per cent. died while under treatment. The value of elevation in the treatment of phthisis is illustrated by the high percentage of improvement. Information has been obtained from 419 cases: 168 have died (3 of intercurrent disease); 32 temporarily improved are approaching a fatal termination; 79 remain so much improved that they attend to their business; and 125 may be considered as cured as they enjoy the best of health and have suffered no serious relapse.—*Prager Med. Wochenschr.*, July 20, 1892.

**Thorburn (J. D.) on Points of Clinical Interest in Pulmonary Tuberculosis.**—The author draws attention to a hitherto (so far as he is aware) undescribed sound which is frequently present within a few minutes after cessation of bleeding from the lungs. Placing the ear near the apex-beat of the heart, within an inch or so of the chest-wall, a sound is distinctly audible, not sharp, but dull and booming in character, a sound very similar to that heard when a submerged bottle is filling. This sound is not synchronous with either the heart's beat or with that of the respiratory murmur. It begins about five minutes after the hemorrhage, disappearing again after a short time, occurring from ten to fifty times within the minute, and is limited to the præcordial space. Reference is made to the change in locality and intensity of sounds, influenced by various causes, such as change of bodily posture, and the ease with which an impaired resonance can be detected when the patient is lying down, whereas, while standing, no difference of sound is apparent, both apices seemingly giving the same note. The height of the suspected lung in a case of suspected phthisis affords most valuable assistance in clearing up the diagnosis. If

the apices are carefully marked out (the lightest percussion being used) and indicated on the chest-wall by some coloring fluid, if the levels are equal, then it is strong presumptive evidence against organic change. Sometimes, however, this physical sign is of uncertain value, for instance, where there is an emphysematous condition around a solid apex. Every patient under treatment should be weighed once a week, but special care must be exercised in selecting the same hour of the day. The reason for doing so is that almost invariably the evening body weight of a patient exceeded that of the morning from one to three, and in one case as much as three and one half pounds. This cannot be explained by the quantity of food consumed. The body-weight is not always a true indication of what changes the lungs are undergoing; there may be an increase of tubercular process, and at the same time an increase in weight, or the contrary. Rapid increase of weight warns us of a liability of returning hemorrhage in those subject to hemorrhagic forms of the disease. A gradual increase in weight justifies a favorable prognosis. A certain type of cases is called asthmatic; in them in addition to the ordinary symptoms of peribronchitic consumption there occur sudden attacks of asthma of prolonged duration and alarming severity, the temperature being either febrile or subnormal in character. The attacks present a few almost pathognomonic peculiarities. The patient does not seek the bent-forward or semi-

erect posture, but rather the prone position. The face, although drawn, does not bear an anxious expression; the alæ of the nostrils remain passive, and there is to a great extent absence of facial congestion. There is always a neurotic temperament, and night sweats are not marked, although day ones are. The tissues over the turbinated bones are usually swollen during the attack. Although cocaine locally modifies the severity, it must be used with great care, as these cases do not bear the drug well. Antipyrine acts much better. Potassium iodide gives the best result in the general treatment of the disease.—*Montreal Med. Journal*, July, 1892.

**Prausnitz on the Use of "Wood-Wool" in Cuspidores.**—The use of sand or sawdust for filling cuspidores has been generally condemned as permitting the sputum to dry and escape in the form of dust. The use of water or of a disinfecting fluid is an improvement; a portion of the sputum, however, does not reach the fluid, and for the destruction of tubercle bacilli not only is a strong disinfectant necessary, but a long time is necessary for its action. The use of "wood-wool" (long, slender wood shavings used for packing fragile articles) for filling cuspidores is recommended, as it rapidly absorbs the sputum, preventing escape of the bacilli, as a firmly clinging crust is formed. Disinfection is accomplished by simply casting the ball into the fire. The material furthermore is cheap.—*Abstr. in Centralbl. f. klin. Med.*, Aug. 13, 1892.

## REPORT ON GYNÆCOLOGY.

BY WM. EVELYN PORTER, M.D.

**Currier (Andrew F.) on the Causes and Treatment of Sinuses Resulting from Abdominal Section.**—The formation of sinuses following certain cases of abdominal section affords a striking example of the efforts of nature to protect the body from the results of injury. The causes of this formation may be constitutional, irritative, and septic.

(1.)—Constitutional or predisposing causes are found in cases where there is an excessive secretion from the peritoneum, as in tubercular peritonitis, syphilis, malignant diseases of the peritoneum, or disease of abdominal viscera resulting in obstruc-

tion to the visceral or peritoneal circulation.

(2.)—Irritative causes may be mechanical or septic, the irritation in the latter variety being chemical and mechanical also. Glass drainage tubes are chief among irritative agents, especially when they are large and used for a long time. They are surrounded by adherent coils of intestine and omentum, forming a solid mould of the tube. If the walls of this mould collapse after the removal of the tube no harm results, but unfortunately in many cases this does not occur, a troublesome sinus remaining instead.



The irritation from ligatures or sutures frequently causes sinuses to form. These sinuses are frequently long, irregular, and intricate, leading to large pockets or cavities formed by the agglutination of coils of intestine.

The irritating effect of ligatures was appreciated by the earlier ovariologists. Keith substituted for them the cautery as far as possible, and Reaslee cut and removed those surrounding the pedicle as soon as the danger of hemorrhage had passed. Gauze has been substituted for glass tubes in abdominal drainage by many who claim that it is less irritating.

The subject of sepsis as a cause of sinuses is more or less unsettled and indefinite. Occasionally sinuses will occur where drainage has not been employed, and where the ligatures have been absolutely aseptic, the septic focus existing in blood or pus within the cavity, or some poisonous material introduced from without. The results of this condition are extremely annoying and often deleterious. Not infrequently the function of the intestines is interfered with; fistulæ of the bladder and intestine form; vesical irritation, nephritis, anæmia, and conditions dependent upon prolonged suppuration develop. Thus the beneficial effects which might otherwise have resulted from the operation are destroyed.

Exploration of sinuses is often difficult on account of their extent and the danger of penetrating the intestines or the peritoneum. The alternatives of treatment are expectancy, palliative or radical measures. Where good nutrition is maintained, spontaneous cure will sometimes result without any local treatment. Thorough cleanliness is important in the local treatment, although it is often difficult to maintain on account of the length and irregularity of the sinuses. For irrigation various antiseptic solutions may be employed, such as carbolic acid, creolin, or Thiersch's solution. The abdominal opening should be large enough to afford free drainage. Applications of nitrate of silver and trypsin have been used, although with the latter there is danger of eating an opening into the intestine or bladder, the author having seen both of these accidents result from its use. Drainage from the abdomen to the vagina, or the removal of an offending ligature will prove efficacious in some cases. For obstinate cases which resist all

of these measures, there remains only the radical procedure of reopening the abdomen, breaking up adhesions, and dissecting away the thickened and diseased tissue. This, however, is apt to prove an operation of great danger, and may fail even when performed by the most skilled operators. With improvements in technique, in the future this promises to be the operation for the relief of this troublesome condition.—*Am. Gyn. Jour.*, Sept., 1892.

**Hanks (H. T.) on Rules to be Followed to Prevent Secondary Hemorrhage from the Pedicle after Ovariectomy.**—Formerly there was great anxiety felt by ovariologists in regard to secondary hemorrhage from the slipping of ligatures. The writer records a case in which, fearing such an accident, he had sewed the stump into the abdominal wound. The patient recovered and has since given birth to a healthy child, without any untoward symptoms. Even to-day in the hands of good surgeons hemorrhage from this cause will occur. Two cases are reported by the writer, and he has known personally of at least ten deaths within the past five or six years.

In order that the number of such fatal accidents may be reduced to the minimum, the following rules are suggested:

(1.) When the pedicle is wide and flat, we should not follow the same routine method which is practicable for a small, round pedicle. But after the fluid has been evacuated, the loose sac should fall over the wound to one side; the pedicle near the uterus should then be grasped with the thumb and index finger of the hand most convenient, and the *artery* should be *located*. It can be done in many cases *quickly*, and in all cases with more or less certainty, in *two minutes*. After locating the larger artery cut down upon it with the scalpel, and tie it thoroughly. If time is an element which has to be considered *especially*, then, after locating the artery, pass a round-pointed or blunt needle down on one side and back on the opposite side. Then tie thoroughly. Do the same with any vessel which you can feel pulsating. Then *quilt* the broad pedicle in and out with the needle and suture, so that under no circumstances can the silk slip. Possibly after ligating the arteries the pedicle can be safely surrounded with a strong ligature, drawn tightly. But in any case only a small surface for granulation should

be left, in order to avoid the possibility of all accidental intestinal adhesions.

(2.) \* In smaller pedicles try and discover the artery before transfixing, and then pass the transfixing needle to one side of it and tie thoroughly. In other words, in small pedicles *be sure and not pierce* the artery or split the pedicle by too much traction before tightening the ligature. After tying, drop the stump back and watch for bleeding points for full one minute. Avoid tying when using too much traction on sac.

(3.)—In removal of diseased tubes and ovaries, if they are displaced and embedded in old exudations, there will be only small arteries to deal with, and almost any well-tied ligature will hold when well applied. Any strong, absolutely aseptic silk or catgut may be used. In using catgut, the assistant should hold it securely after the first turn of the knot has been made, until the second is made and tightened. With catgut, furthermore, we must reverse the process adopted in tying silk, and make the first part of the knot with one turn and the second part with *two turns*.—*Am. Jour. of Obst.*, Oct., 1892.

**Paton (Stewart) on a Case of Ovarian Cyst with Very Marked Torsion of the Pedicle.**—A careful study of statistics shows that axial rotation of the pedicle of ovarian tumors occurs in about ten per cent. of all cases. Of this number the majority are due to slowly acting causes, as peristalsis, the emptying and filling of the bladder, and pregnancy. The acuteness of invasion and extreme degree of torsion render the following case of peculiar interest. The history as given by the writer is as follows:

Mrs. —, Sof Buford, S. C., a patient of Dr. Stuart's, age fifty. Married twenty-three years. Has had seven children. No miscarriages. Menopause at forty-three. The tumor "was first noticed at the time of change of life" and for seven years had grown slowly but steadily. The only symptoms being distension of abdomen, backache, and constipation. Had never suffered from any attacks of acute pain until she left home for New York on October 28, 1891. On the sleeping-car the patient said she was "jolted about considerably" and that she had "two attacks of sharp colicky pain, each lasting two or three hours." The pain was confined to the left iliac and lumbar regions, and in the interval between the attacks of pain there

was marked tenderness over these areas. On the patient's arrival in this city, October 30th, she was immediately put to bed. She was in a fair general condition. Pulse 105. Temperature 100°. On examination it was evident that the patient had a large ovarian cyst. There was very great tenderness over the left iliac and lumbar regions, and about the centre of this area a hard globular mass, the size of an orange, immovable, and apparently connected with the tumor could be easily outlined. The bowels were freely moved by the use of salines and the ice coil applied.

November 1st. The patient did not experience any sharp attack of pain and most of the tenderness had disappeared. Pulse 90. Temperature 98.5°.

November 2d. During the afternoon the patient being still in bed experienced several attacks of sharp colicky abdominal pain. There was tenderness on pressure all over the abdomen, but over the left iliac and lumbar regions it was exquisite. Temperature 104°. Pulse 110. It was decided to operate early the next morning.

November 3d. Pulse 112. Temperature 102°. Laparotomy by Dr. Thomas.

On opening the abdomen a large cystic ovarian tumor was discovered. The sac with its contained clear fluid after removal weighed twenty pounds. The pedicle was twisted five-and-a-half times on its long axis and then, as viewed from above downwards doubled on itself so that at the point of greatest torsion the globular mass presented which had been felt in the left iliac region. The pedicle was almost black in color and gave evidence of strangulation and beginning sphacelus. There were no adhesions but the peritoneal covering of the left iliac and lumbar regions was markedly congested and there was considerable injection of all the peritoneal vessels showing an incipient peritonitis. The pedicle was tied off close to the uterus and the tumor removed. The stump was cauterized and the abdomen flushed with warm distilled water and closed without drainage.

Thirty-six hours after operation the patient's temperature was normal, and she had an uninterrupted recovery. The interesting points to be noted in connection with the case are: (1) The acuteness and severity of the development of the symptoms—beginning shortly after the patient boarded the train at Buford and continuing with greater or less severity until after operation.

(2) The paroxysmal character of the pain and the intermittent character of the other symptoms. (3) The amount of torsion to which the pedicle was subjected and the doubling of the pedicle upon itself. (4) The marked elevation of temperature, and the immediate subsidence following operation. The sudden elevation of temperature is interesting from the fact that it denoted a sapræmia and not a true septicæmia, a condition resembling the fermentation fever of Bergmann. Undoubtedly in a few hours had the patient not been operated upon a true septicæmia would have made operative interference of no avail.—*N. Y. Journ. of Gyn. and Obst.*, Aug., 1892.

**Lannelongue on Perforation of the Uterus by the Curette.**—The author reports the case of a patient, aged sixty-four, a IV.-para, suffering with complete prolapse, with metritis. After dilatation, curettement was performed. The irrigating curette which was used passed up for a considerable distance, and the injected fluid did not return, showing that perforation had undoubtedly occurred. Vaginal hysterectomy was at once resorted to, and a perforation found between the body and the neck, the entire uterus being soft and flabby. The patient recovered.

In a second case, aged thirty-one, also a IV.-para, there was endometritis and salpingo-ovaritis, in addition to cystocele, rectocele, and ruptured perineum. The cervix was dilated and the endometrium thoroughly scraped with the irrigating curette. While curetting the right cornu it was noticed that the return flow of fluid ceased, although the curette was apparently within the limits of the uterine cavity. As the patient was young, and it was uncertain whether the uterus was perforated, hysterectomy was not performed. The uterine cavity was cleansed, the cervix amputated, and colpo-perineorrhaphy performed. On the second day the abdomen became distended; the following day stomatitis developed, and sublimate poisoning was suspected. On the tenth day diarrhœa began, with albuminuria, and on the nineteenth day erysipelatous patches appeared on the forehead, and the patient died. Autopsy revealed a soft abdominal tumor; the uterus large and flabby, and filled with pus, with a perforation in the right cornu; general purulent peritonitis. The writer advocates hysterectomy where the uterus has been perforated before the scraping

has begun, but believes that the uterus may be saved in young subjects if it has not been pierced until the cavity has been well cleared—that is, toward the end of the operation.—*Arch. de Tocol. et de Gynéc.*, May, 1892.

**McMurtry (L. S.) on the Relation of the So-Called Minor Gynecological Operations to Intrapelvic Inflammation.**—In his paper the writer contends that a large proportion of the cases of intrapelvic inflammation ending in structural alterations, requiring surgical treatment, are the direct results of manipulations and modes of treatment directed for the relief of minor affections of the pelvic organs. In the support of this view he presents the following summary of the points brought out in his paper:

1. The etiology of intrapelvic inflammation (salpingitis, ovaritis, and peritonitis) may be threefold: (a) puerperal, (b) specific, (c) post-operative (traumatic).

2. Unnecessary and uncleanly examinations, with introduction of the sound, may cause, by traumatism and infection, pelvic inflammation.

3. Forcible dilatation, with steel instruments, sponge tents, and other instruments, may beget intrapelvic inflammatory disease. This operation has a very narrow sphere of utility, and is usually performed upon erroneous pathological data.

4. Operations on the cervix, with associated disease of the appendages, is dangerous. The treatment of lacerations by caustics and astringents is never satisfactory, and always dangerous. Trachelorraphy is an operation of high utility, but requires discrimination in application and skill in execution in order to obtain good results. It is often the initial step in tubo-ovarian disease of severe type.

5. Curettement, while of unquestioned value in removing neoplasms and detritus from the endometrium, is abused as a method of treating inflammatory conditions of the pelvic organs. The curette is an instrument capable of causing extensive lesions, that may light up an inflammation extending to the appendages and peritoneum, or aggravate a pre-existing inflammation therein.—*Buffalo Med. and Surg. Journ.*, Sept., 1892.

**Gordon (S. C.) on Hysterectomy without Pedicle.**—That more radical treatment of uterine fibroids is demanded by the profession is generally acknowledged. Formerly the symptoms were treated as

they arose, and the patient informed that the condition was rarely fatal and usually disappeared after the menopause. Notwithstanding the exhausting hemorrhage, pain, and impairment of function of vital organs, conservative surgery counselled waiting, and forbade removal of the growths.

Curettement was first suggested and practised for the relief of hemorrhage. In a certain percentage of cases, however, this failed, and complete removal of the uterus was resorted to. Kieth was an ardent advocate of hysterectomy for a time, but later became interested in the use of electricity as suggested by Apostoli. For the past ten years the writer has advocated hysterectomy as the only proper "conservative surgery" for uterine fibromata. While removal of the appendages and curettement has done more than other measures for relief, they both fail to remove the tumor. At the present time the principal difference of opinion lies in the method of performing hysterectomy, especially as regards treatment of the pedicle. Nearly all agree in making a pedicle of the cervix, and either bringing it into the abdominal wound or dropping it into the cavity. Where the latter method is followed the stump should either be cauterized or covered with peritoneum. The author has tried the various methods and has adopted the following: Commencing by ligating as much as possible of the broad ligament by a catgut ligature on each side, he divides between it and the uterus, controlling hemorrhage from the uterus side by clamps. The folds of the ligament are next closed from this point down by an over-and-over catgut suture, until the uterine artery is reached, when it is surrounded and secured by the suture. The peritoneal covering of the uterus is dissected off in front and behind, separating the bladder and utero-sacral attachments. The flaps are held by forceps until the attachments on each side are completely severed and secured by the suture, which is then carried across, uniting the peritoneal flaps after removal of the uterus. The peritoneal cavity is thus shut off from any septic infection from below. The chief difficulty with this method is in securing the uterine artery, and separating the anterior attachments of bladder and vagina, particularly when the cervix is very long. When the tumor involves the cervix, there is much less difficulty in freeing these attachments.

By this method no pedicle is left to give anxiety, and in the writer's experience the percentage of mortality has been no larger than from laparotomy for other causes.—*Am. Gyn. Four.*, Aug., 1892.

**Vander Veer (A.) on Management of Cancer of the Uterus, Complicated by Pregnancy, with Report of Case.**—Fortunately, pregnancy and uterine cancer are conditions rarely associated. Winckel, Stratz, and Stutugin saw, out of nearly 42,000 cases of pregnancies, in three great obstetric clinics, but twenty-two cases of cancer of the uterus, as a complication. Barker reported three cases which were delivered of living children at term, the mothers surviving. Puckett, out of twenty-seven cases, reported five deaths during labor, and nine shortly after delivery, ten recovering from labor, the results in the remaining three not being stated. Cohnstein found a maternal mortality of fifty-seven per cent.; Hermann, out of 180 cases, found a maternal mortality of forty per cent. Out of nearly 300 women suffering from this complication, and in labor at end of gestation, fifty-two per cent. died undelivered or never left their beds.

The mortality is not materially lessened by abortion or premature delivery. Sepsis, hemorrhage, and rupture of the uterus are the three principal causes of death, and where they escape these, they usually succumb to the disease within three months. Of the cases already referred to only 33 per cent. of the children were born living.

With this frightful rate of mortality it is obvious that prompt and radical measures are demanded! Total extirpation of the uterus and its contents, where the disease is confined to the uterus, is clearly indicated. Prior to the fourth month this can usually be done by the vaginal method. The writer reports an interesting case of a woman, aged twenty-seven, pregnant about two and one-half months, suffering from carcinoma of the cervix, where he performed this operation successfully. He states, moreover, that sixteen cases, including that one, where vaginal hysterectomy has been performed prior to the end of the fourth month, the mortality was *nil*. In operable cases between the fourth month and term, hysterectomy by Freund's method, as modified by Zweifel, is indicated. At term, we must decide in the individual case between regular delivery and Porro's operation.—*Am. of Gyn. and Pæd.*, Aug., 1892.

## REPORT ON SURGERY.

BY CHARLES N. DOWD, M.D.

**Powers (C. A.) on the Question of Early High Amputation in Senile Gangrene.**—Dr. Powers reports a case to emphasize the importance of amputation through the thigh where senile gangrene has extended from the toes to the foot.

The patient was sixty-seven years old, and had suffered with syphilis in early manhood, but had had no later manifestations. He had used alcoholics moderately. For several months he had had indefinite pains in leg and foot, slight at first, but later becoming so severe as to prevent locomotion. Areas of diminished and lost sensation had in turn appeared. When he came under observation the entire foot was without surface-sensibility—livid and cold. Its dorsum was covered with occasional blebs. The leg, as far up as its middle, showed scattered areas of insensibility and patches of lightish purple mottling, there being, however, no distinct line of demarkation. No evidence of recent or old injury to the toes or foot could be found.

There was no pulsation to be felt in either of the tibials, in the popliteal, or in the femoral at Hunter's canal. The latter vessel pulsated under Poupart's ligament. The heart sounds were weak but otherwise normal. The urine was negative upon examination.

The continuous pain had tended to weaken the patient's general strength; he had developed a slight daily fever.

After consulting with Dr. Wm. T. Bull, he amputated through the middle of the thigh by anterior-posterior flaps. The femoral artery was thickened, calcareous, and occluded by a firm clot. It was secured by heavy cat-gut, and did not pulsate after removal of the bandage which had been lightly placed about the thigh at the upper third. Occlusion did not extend to the other vessels of the stump.

The operation was followed by no shock, but the patient developed hypostatic pneumonia and died at the end of the third day. The flaps, however, showed primary union with no areas of malnutrition and no pus.

Dr. Powers refers to the writing of Jonathan Hutchinson, who believed that the amputation for senile gangrene due to

arterio-sclerosis was only followed by sloughing of the flaps when the part was removed too near the disease. When amputation is done at a low point, the condition of the vessels will rarely be found to be such as to admit of repair; gangrene of the stump usually occurs immediately, and places the patient's life in much more danger than before the operation.

He urges amputation above the knee where there is gangrene of the foot, and near the shoulder-joint where there is gangrene of the hand. He adduces a number of cases in which he successfully amputated through the lower third of the thigh for gangrene of the foot.

Heidenhain published cases of senile gangrene of the lower extremity which he has seen in the clinic of Küster at the Augusta Hospital in Berlin, and states that Küster had at first contented himself with the simpler form of interference—low amputation. The constant occurrence of gangrene in the amputation-wound, however regularly, compelled further high amputation, so that he was led through his practical experience to amputate at or above the knee in every case in which the gangrene had extended from the toes to the dorsum of the foot.

It is worthy of notice that in Dr. Power's case, although all the conditions were adverse, he still obtained good union in the flaps—*Am. Jour. Med. Sci.*, Nov., 1892.

**Stiles (H. J.) on Carcinoma of the Mamma.**—Dr. Stiles during three years has examined more than one hundred mammary carcinomata. A portion of his conclusions are given below.

1. The cancer in about 90 per cent. of the cases assumed the form of a single, non-encapsulated, clearly defined, but microscopically infiltrating tumor.

2. The histological structure was essentially the same in all, consisting of clusters of modified epithelial cells in the lymph spaces and lymphatic vessels of a vascular connective tissue stroma.

3. These modified epithelial cells differed from the normal epithelial cell of the gland in the following respects:

The nucleus was 2 to 3 times as large. The chromatine was relatively less in

amount. The nuclear membrane was very distinct. Cells undergoing mitosis were abundant. Multinucleated cells and cells with fragmental nuclei were common, especially in rapidly-growing tumors.

4. The stroma of the tumor consisted partly of the pre-existing tissue and partly of newly formed tissue. In the meshes of the stroma were leucocytes more or less numerous.

5. The cancer cells lay loose in the tissue spaces of the stroma and were therefore liable to be washed into the lymphatics by the lymph stream.

6. The secondary cancerous foci were due to lymphatic dissemination of the cancer cells derived more or less directly from the primary tumor.

7. By the "nitric acid method" he had shown that the gland parenchyma extended much farther in all directions than was generally supposed, and that the surgeon frequently fell short of his intention to remove the entire breast.—*Brit. Med. Jour.*, Sept. 24, 1892.

[Lack of space forbids the quotation of Dr. Stiles' conclusions in full. He certainly makes the distinction between the so-called cancer cells and epithelial cells more definite than most observers are able to. There is little doubt that cancers can be spread by the blood-vessels as well as by the lymph channels. C. N. D.]

**Armand Ruffer (M.) and Herbert Walker (J.) Preliminary Note on Some Parasitic Protozoa Found in Cancerous Tumors.**—The authors describe forms somewhat similar to amœbæ which he noticed in the epithelial cells of carcinomata, and which he considers to be parasitic. Since perfecting his methods of staining he has never failed to find them in carcinomata of the breast, tongue, intestine, stomach, liver, rectum, bile ducts, and epiglottis. They were in the cancerous epithelial cells only—not in the epithelial cells of the surrounding tissue. In the liver, *e. g.*, the normal or degenerated liver cells never contain them. They were in the greatest number near the growing edge of the tumor. Although it is extremely rare to find a cell containing a parasite and undergoing indirect division, yet many of the surrounding cells do undergo division. It would appear that the presence of a parasite in an epithelial cell leads to the decay of that cell and to the active pro-

liferation of the neighboring ones.—*Brit. Med. Jour.*, July 16, 1892.

[In order to follow the tests which by general consent are believed necessary to prove that any micro-organism is the cause of a disease, these bodies must be made to grow outside the human body, and after they are isolated by this growth they must be inoculated and produce cancer. Until these steps are taken we must await further developments before believing them the cause of carcinoma.

The investigations of Rupper and Walker, however, are of interest, since it is altogether likely that they indicate the direction in which the cause of cancer will be discovered.—C. N. D.]

**McCosh (A. J.) on Excision of Cancer of the Rectum.**—The writer records five cases of his own, and gives a general review of the subject.

The English surgeons generally restrict the operation of excision of cancer of the rectum to those cases where the finger can reach above the cancer and where the adjoining organs are not involved. The German surgeons, on the other hand, do not hesitate to operate on cases where the disease extends much higher than four inches, and where the peritoneal cavity must be freely opened. The American surgeons are less conservative than the English; more so than the Germans.

In approaching the cancer, it is frequently a great advantage to make a median incision from the anus to the middle of the sacrum and remove a portion of that bone. It is alleged against this method that by it the pelvic floor is weakened, that there is a greater tendency to prolapse of the bowel, and that by disturbance of the sacral nerves the functional control of the rectum must be lost. The first two objections are largely theoretical, and even were the last a valid one, it can not be considered as important, for the control over the sphincter muscles after any rectal operation is apt to be very imperfect.

In all sacral operations certain of the nerves must be divided, and it is not a matter of indifference which ones are sacrificed.

Division of the posterior branches of the sacral nerves is of little moment, as no important tissues are supplied by them. Division of the anterior branches of the fifth nerve is also unimportant. Division of the anterior portion of the fourth, if con-

fined to one side, is not followed by serious disturbances. Division of the anterior branches of the third nerve should be avoided, as they enter into the formation of the ischiadic plexus, and serious changes in the enervation of the pelvic organs are liable to follow injury of either of these branches.

Among Dr. McCosh's cases he records one in which he removed the coccyx and the lower inch of the sacrum, drew down the rectum, and cut it across eight inches above the anus, divided three or four inches of meso-rectum, and removed a few hardened lymph nodes. This, of course, carried him well into the peritoneal cavity. The sphincters of the anus were divided posteriorly, and left in position, the rectum being cut across just above them, as the patient was in a condition of shock. The wound margins were approximated, the wound packed with iodoform gauze, and the further operation stopped.

The rectum did not unite with the skin, and its lower inch necrosed. At a second operation the end of the rectum was again freed, an opening being made into the peritoneal cavity in freeing it. It was then brought down and inclosed in the sphincter, union was obtained, and the patient gained perfect control over the bowels, except when she had loose diarrhoeal movements. Nine months after the operation she reported that she had gained thirty pounds, and was as well as at any time in her life.

Dr. McCosh thinks the cut end of the rectum should not be left unattached, but should be drawn down and sutured to the skin; that the wisdom of attempting to preserve the lower part of the rectum about the anus is doubtful, and that an opening into the peritoneal cavity should be packed with iodoform gauze, and not sewed up.

In comparing excision with colotomy, he makes the following premises:

(a) Excision is the more dangerous operation.

(b) Excision radically cures a certain number of cases.

(c) Excision affords greater prolongation of life.

(d) Excision may be repeated a second and third time, and yet result in cure.

(e) Excision affords greater relief to the patient, even when relapse occurs.

In conclusion he states:

1. The mortality of the operation is about nineteen per cent.

2. Cases can be successfully operated on when the disease extends higher than the peritoneal attachment.

3. Certain patients are permanently cured, probably about eleven per cent. of all cases operated on.

4. In patients who have a recurrence of the disease, excision gives a longer life and a more comfortable one than does colotomy. — *N. Y. Med. Four.*, Sept. 3, 1892.

**The Present Position of Gall-Bladder Surgery.** — Czerny (*Deutsche Medicinische Wochenschrift*, 1892, No. 23) reviewed in *Am. Four. Med. Sci.*, Nov., 1892, after a general consideration of gall-bladder surgery, presents the following conclusions:

1. Gall-stones require operation, if they cause frequently repeated or lasting trouble.

2. Empyema of the gall-bladder imperatively demands operation, as does hydrops, if it gives serious trouble.

3. The typical operation for gall-stones consist in incision, removal of the stones, and suture of the gall-bladder: in this, however, the abdominal wound should be drained for a short time.

4. If the cystic duct is closed, if the gall-bladder is the seat of inflammation, or its contents are greatly altered, then a temporary gall-bladder fistula must be made.

5. Extirpation of the gall-bladder is indicated only in cases of severe inflammatory or carcinomatous involvement.

6. When the ductus choledochus is closed, the operation is absolutely indicated if the strength of the patient will permit. If one does not succeed in removing the stone or obstruction, then it is recommended to produce a fistula between the gall-bladder and duodenum.

7. The best incision for gall-bladder operations is an J-shaped cut; the vertical limb lies in the linea alba, and the horizontal part runs towards the right just below the level of the umbilicus.

8. The danger to life in gall-stone operations will be probably less than in operations for vesical calculus.

**DeLépine (S.) on Protozoa and Carcinoma.** — The observer made a careful study of psorospermiosis in the rabbit from the coccidia which were found in livers of rabbits suffering from this disease. He figured different forms of these coccidia with great care, and succeeded in cultivating them in a moist chamber and studying the stages of their growth.

He then obtained the liver of a patient who had died from carcinoma, which had a distribution similar to that of the coccidia in the rabbit's liver.

He figured forms which he had first thought to be similar to the coccidia in the rabbit's liver, and which he thinks were identical with those described by Soudake-

witch and Ruffer. He was unable, however, to find proof that these forms were parasitic, and he failed in all efforts to cultivate them. He does not believe that these bodies are parasitic, and calls on Soudakewitch and Ruffer to prove that the bodies which they describe are really so.—*Brit. Med. Jour.*, Sept. 24, 1892.

## ADDITIONAL REPORT ON PRACTICAL MEDICINE.

**The Diseases and Accidents of Great Crowds.**—The medical history of the great Columbian celebration, which produced so much enthusiasm in New York city, deserves some attention, and if it could be completely written would prove most interesting. There were probably four hundred thousand or five hundred thousand visitors during the week, and perhaps a quarter of a million persons crowded the streets along which the parades were held. It is estimated that two hundred persons were more or less hurt or taken ill. The census as gathered by newspaper reporters from the police reports and hospitals makes the number about one hundred. Our readers will be interested in the list, as showing the accidents and diseases of great crowds. It is as follows:

Fainting, 35; hysterical seizures, 3; epileptic fits, 11; sprains, 3; run over, 3; fractures, 10—1 of the arm, 2 of the skull, 7 of the legs; falls, 11; cramps, 1; dislocation, 1; burned, mortally, 1; struck by a brick, 1; "taken sick," 13. Total, 94.

This shows that fainting is the most frequent pathological phenomenon, that crowds are bad for epileptics, that falls and fractures are numerous, and that delicate people are liable to be "taken sick." On the whole, the record is not a bad one, considering the enormous congregation of people. The reports also show that the sick and injured were promptly and efficiently cared for, and our much-abused ambulance service evidently did yeoman's duty on the occasion.—*Ed. N. Y. Med. Record*, Oct. 22, 1892.

**Ghriskey (A. A.) on Bacteria in Bottled Waters.**—Dr. Ghriskey has lately made an analysis of the so-called "table" waters which are now sold in such immense quantities.

The samples of Poland water examined came from different druggists. In three

bottles which, according to the labels, had been filled and corked directly at the spring, the number of bacteria found was three hundred to the cubic centimetre, which is not a larger number than good potable water usually contains. These organisms were of two kinds: one, mould, not identified, the other a motile bacillus, resembling in some respects the typhoid-bacillus of Eberth, but readily differentiated from it by culture-methods.

In two samples of the same water that had been obtained from the spring in large vessels and transferred to soda-water tanks, in order that the water might be sold by the glass from the fountain, there had been contamination. One of these contained six thousand and the other fifty-seven thousand bacteria to the cubic centimetre, and in the flocculent sediment in the eight-ounce bottles in which the specimens were obtained, were found various forms of ameba, of flagellate protozoa, of radiolaria, and of one form of algæ.

It would seem probable, therefore, that this water had been mixed with some less pure water in its transfer to the tanks from which it was drawn for sale; but it is very possible that this may have resulted, not from a deliberate mixture, but from washing out the tanks with an impure water.

A bacteriologic examination of any water is only trustworthy when it is made at the source, or with special precautions as to sterilized vessels, cold storage, etc., if the water is to be carried for some distance before examination, because the bacteria multiply rapidly at first in the bottled water, and then largely die out, leaving, however, their products behind them.

Bacteria in bottled or cask waters are not necessarily derived from the spring itself. They may be introduced in the process of cleansing the vessels, or from the persons of those engaged in filling them, and hence



a very serious responsibility rests upon those who furnish such waters from the spring, and still more upon those who handle it for sale in such a way as to mix with it even a few drops of other water.—*Phil. Med. News*, Oct. 8, 1892.

**Kramer (F.) on the Toxalbumens Formed by the Staphylococcus Pyogenes Aureus.**—In a paper recently read before the Cincinnati Academy of Medicine, Kramer reported the results of his investigations of the metabolic products formed by the staphylococcus. Bouillon cultures of the germ were passed through Chamberlain filters, and in this way the soluble products formed by the germ were separated from the germ itself. The injection of moderate doses of this filtrate seemed to be non-toxic in rabbits. Injection of small doses of the filtrate in the forearm of the author was followed by marked local and general reaction. The temperature rose a degree and a half, the pulse accelerated, accompanied by headache, pain in the back, and general malaise. At the point of injection was a well-marked induration accompanied by redness, tenderness, and slight oedema. The general reaction passed off in the course of eight hours; the local irritation remained for seventy-two hours, ending in slight desquamation.

In endeavoring to determine the exact properties of the toxine shown to be present, the author obtained the following results: A temperature of 60° C. for half an hour destroyed the general toxicity of the filtrate, but left the local effect produced by it unchanged. By means of precipitation with alcohol a light, tan-colored, albuminous powder was obtained, insoluble in water, soluble in 1 per cent. sodium carbonate solution, which, when injected, produced a well-marked local inflammation. Efforts to isolate the toxine which produced the general symptoms were without results.

As the result of this investigation, the author drew the following conclusions: The staphylococcus pyogenes aureus produces toxic albuminous products of two kinds: (a) A readily diffusible substance difficult of isolation, very susceptible to heat and chemical reagents, which, when absorbed in the human system, produces symptoms of general disturbance. (b) A less diffusible albuminous substance not very susceptible to 60 to 70° C., nor to

chemical reagents, which, when injected in the human subject, produces at the point of injection a well-marked inflammation. The author further suggested the therapeutic possibilities offered by the local irritant produced by this germ. Its advantages consist in being an essential counter-irritant, which, injected in small doses, produces a well-marked irritation; in larger doses almost an erysipelas inflammation. There is no abrasion of surface to become infected; there are no dangers of general disturbances attending its use, and the effect produced is thoroughly in control. He also constructed a theory of suppuration as produced by the staphylococcus, as the result of these investigations, as follows:

The staphylococcus, during its growth in the tissues, produces a toxine which, when absorbed, gives rise to the general symptoms attending a local suppuration. Furthermore it produces a toxic substance which is highly irritant and which possesses a strongly positive chemotaxis for the leucocytes. The duty of the leucocytes is twofold. First by virtue of these phagocytic properties they restrain the growth of the germ, and secondly the local necrosis caused by their effusion enables the organism to discharge the bacteria toxic products and necrotic tissue present.—*Cincin. Lan.-Clin.*, Oct. 1, 1892.

**Deshon (R.) on Clinical History of the First Case of Cholera in New York.**—The man was thirty-five years of age, born in Ireland, and a resident of New York City for the past ten years. He was of dissolute habits and a hard drinker. His occupation was that of a plasterer and laborer, mainly along the river front.

He was taken sick on September 5, 1892, but previous to that date he had slight painless diarrhœa. On that night the diarrhœa increased in severity, causing him considerable annoyance. The following morning he arose feeling very weak, but well enough to eat a light breakfast and go to his work. At about 10:30 A.M. the diarrhœa became so violent, muscular debility and tremors, with a feeling of faintness, having been ushered in, that he was obliged to leave his work and go home. At 2:30 P.M. I was called to see the patient. I noticed that his face was pallid and had a very anxious expression, and nervous symptoms, such as tremors and vertigo, were very decided. The thirst was insati-

able. There was also nausea and vomiting, with slight griping pains in the bowels. He had had about eleven stools since 10:30 A.M. His axillary temperature was 101° F., pulse irregular. The patient complained mostly of cramps in the muscles of the calves of the legs, arms, and fingers.

After prescribing and giving directions regarding the treatment, I left, feeling rather anxious about the case. At 8:30 P.M. I returned and found that the diarrhœa and vomiting had entirely ceased, and I was therefore unable to examine the excretions. At this time the patient's temperature was 97½° F., the pulse hardly perceptible, respirations oppressed and difficult, the tongue was dry and covered with a white coating, the hands and feet were cold and clammy, and covered with a slight moisture. All the symptoms of impending collapse were present.

The attendant informed me that the cramps in the abdomen had been so severe in the afternoon as to cause the patient to cry aloud. Knowing the case to be an important one, I called Dr. Henry F. Robinson in consultation. When we arrived at the house of the patient, at 9:15 P.M., we found him in a state of stupor, the whole body covered with a cold sweat, the radial pulse imperceptible, the eyes deeply sunken with dark rings around them, the skin shrunken and pinched, making the cheek-bones very prominent, and the rest of the body seemed to have assumed a bluish color.

After deliberate consideration of the clinical symptoms, we diagnosed the case as one of cholera Asiatica. The man died about twenty minutes after we left the house.—*N. Y. Med. Record*, Oct. 8, 1892.

#### Edson (Cyrus) on the Propagation and Preservation of Vaccine Virus.

—The method in New York is in some respects unique. Animals a year to two years old are used. When possible, these are splayed heifers, as it has been found that the hides of such are thinner and develop a better pock. The animals are vaccinated on either side of the backbone, commencing at a point about two inches from the root of the tail, running along the back toward the hip bones. Four to six inoculations are made at about two inches apart. Scarifications are made with a peculiarly shaped lancet, having six or eight blades about one-eighth of an inch apart. On the fifth to the sixth day the

virus is taken. The crust is discarded, and the serum, as it naturally exudes from the sore, collected on quill slips. Slight admixture with blood is not considered undesirable, but the slips for the most part are quite free from any such admixture. Occasionally capillary tubes are used, and there is some demand for them. The object of using the region on each side of the backbone is for the purpose of cleanliness, as that part of the animal is least liable to be soiled by lying down in dung and other filth. We have found virus from young adult animals more active and more certain in its results than that from calves.

The heifers are carefully examined by the department veterinarian before vaccination, and daily afterward. When the virus has been collected and the animal has regained a healthy condition, it is killed, all the internal organs examined, and if they are found to be free from disease the meat is sold, and the virus tested, *i.e.*, from six to ten primary vaccinations are performed with it to ascertain if it is active. If the test results favorably the virus is used, if not it is discarded. The excellence of New York City Health Department virus is largely due to the ability, zeal, and labor of Dr. Edward L. Pardee, in whose charge the vaccine laboratory is.

The amount of virus produced in 1891 was as follows:

The number of animals vaccinated was.....	148
Quill slips prepared.....	192,200
Ivory points prepared.....	17,650
Capillary glass tubes filled.....	595

The cost to the city of free vaccination has, during the past six years, been greatly reduced. The following table shows, per vaccination, this reduction by years:

	Cents.
1886.....	34
1887.....	25
1888.....	21
1889.....	22
1890.....	17
1891.....	12

—*N. Y. Med. Record*, Oct. 1, 1892.

**Templeman (C.) on Suffocation of Infants.**—The writer has examined cases of this nature occurring in Edinburgh over a period of ten years. In all cases the child was under nine months old. After this age the danger is practically nil as the child is able to struggle and so avert death. In cases of overlaying, suffocation is produced in one of three ways.

1. By the infant's face being firmly pressed against the mother's breast, thus mechanically obstructing the entrance of air to the lungs.

2. By the bedclothes being firmly placed over the child's face with a similar result.

3. When the child is placed between its parents, or by the side of one of them, who while asleep turns over upon it, thus causing death by overlaying proper.

The usual history obtained is as follows :—The child is put to bed in its usual health. When the mother retires, or at some other time during the night, she places the child on one of her arms, and puts it to the breast. At that time nothing unusual is observed. The mother falls asleep with her infant still at the breast and resting on her arm, and in the morning when she awakes she finds it in this position dead.

The external appearances presented by the body are chiefly of a negative character. There are no marks of violence to be observed. As a rule there is no flattening of the nose and face from pressure. Post-mortem lividity comes on early, and is specially well marked on that side of the body on which the infant has been lying; the face is placid and calm; the eyes sometimes slightly congested, but not staring; the lips are livid, and the tongue not protruded. Frothy mucus, often tinged with blood, is generally seen about the mouth and nostrils. The hands are sometimes tightly clenched.

The principal causes producing this great mortality from overlaying are,—

1. Ignorance and carelessness of mothers; 2, drunkenness; 3, overcrowding; and 4, according to some observers, illegitimacy and the insurance of infants.

A very large percentage of the deaths occur between Saturday night and Monday morning. The only safeguard to its occurrence is that the child should be made to occupy a separate cot.—*Edinburgh Med. Journ.* Oct., 1892.

**Potter (S. B.) on Gasoline Poisoning by Inhalation.**—The patient was an apparently healthy boy of fourteen. He was in the habit of inhaling gasoline as often as opportunity was presented. If he could find an empty gasoline barrel, he was sure to lay upon it with his mouth over the spigot, and inhale it until he became unconscious and rolled off onto the ground and, lay there until recovery, not unlike a

man on a *big drunk*. If he was sent to the grocery for it, he was sure to uncap the spout and inhale the contents.

Potter, when called to see the child, found him unconscious, with a circulation of 104, temperature 102, respiration 18. Skin dry, cyanotic, but not unusually hot; decubitus supine. Would, at times, when loudly spoken to, make some incoherent remarks; pupils normal in size; bowels constipated; urine passed involuntarily. Could, by great effort, get him to take his medicine.

The above symptoms continued, with but slight variation, from day to day, morning, noon, and evening, bringing no perceptible change in temperature, circulation, or respiration, until death closed the scene on the seventh day.

With the above facts in view, the diagnosis was poisoning from inhalation of gasoline, producing subacute inflammation of the meninges of the brain, which was also the opinion of those seeing the case with the attending physician.

*Autopsy.*—About six hours after death rigor mortis was moderately well developed. The calvarium was removed, and on inspection, it was found, the brain and membrane presented the ordinary appearance of those parts after death from inflammation of the same, except that they presented a very much darker hue, so much so they were nearly black. There were no abscesses in the brain tissue. All other organs were normal except the liver, which was about one eighth larger than usual.

Treatment seemed to have had no appreciable effect either pro or con.

The question arises, from the study of this case, is gasoline an anæsthetic that can be used in safety, provided it be administered with the same care and skill in administering as is used in administering other anæsthetics, if we could procure it in a proper state of purity?—*Medical Brief*, Oct.

**Johnson (J. T.) on Illuminating Gas Poisoning.**—Patrick T—, white male, age thirty-two, was admitted to the Maryland General Hospital, medical service of Professor David Streett, at 9.30 A. M., April 22, 1892.

One hour previous to admission, he had been discovered, comatose, in his room, a small attic, with windows and door tightly closed. The room was full of gas, which was still escaping from the jet, just as he

had left it, when at three o'clock in the morning he had returned to his room, and, as he subsequently stated, being half intoxicated, blew out the gas.

Patient on admission was unconscious, pulse 80 per minute, soft and weak, respirations shallow, 5 per minute, extremities, ears, nose, and lips cold, pinched and blue. Deglutition impossible, rectal sphincter paralyzed, feces passing involuntarily, bladder distended with a large quantity of retained urine.

Trinitrin and whiskey hypodermatically were employed at once and repeated at intervals, the immediate result being a notable improvement of cardiac action. Artificial respiration, after the method of Sylvester, was steadily employed for five hours. During this entire period, whenever the patient was left to voluntary effort, artificial respiration being discontinued, after a few feeble attempts breathing would cease, the cold douche and slapping chest with cloths wrung out of ice water provoking only a few feeble gasps.

To stimulate respiratory effort strychnia sulphate in  $\frac{1}{4}$  grain doses was administered hypodermatically, some improvement being noted after each dose; but not until the third dose had been given, five hours after entrance into the hospital, did patient's breathing improve so much that it was deemed safe to discontinue artificial respiration. At this time respirations, though rather irregular, were averaging 10 per minute.

Twelve hours after entrance into the hospital, patient began to develop some pyrexia, his temperature at no time exceeding 100° F. The elevation of temperature continued for twelve hours; there was also active delirium, which was partially controlled by ice-bag to head and chloral hydrate internally. The delirium was marked by great restlessness, the patient tossing heavily from side to side of the bed, seeming to gasp for breath, then after a few minutes settling quietly down with a long-drawn sigh, and breathing quietly as an infant; then, after resting for a short interval, the jactitation was repeated as before.

On the second day respirations remained at eleven per minute, temperature fell to normal, patient took liquid nourishment and rested well. Catheterization still necessary; strychnia sulphate and whiskey continued.

On the evening of the third day, though

there was yet extreme depression, patient was comfortable, respirations 18 per minute, and urination and defecation under voluntary control. On the fifth day, patient was so far recovered as to be removed to his home.

Daily urinalyses were made. For forty-eight hours after admission the urine was loaded with albumen; the volumetric per centum was not determined. Hyaline casts were found.

From this time there was a rapid daily decrease in the amount of albumen, until on the day of discharge there remained only a trace in the urine.—*Maryland Med. Jour.*, Aug. 27, 1892.

**Johnstone (J. A.) on Dermoid Cyst Containing a Heart.**—The writer recently met with a dermoid cyst (removed from an Irish girl twenty-four years old) in which there was an attempt at the formation of a heart. There is a case recorded where an eye was pretty well formed, the cornea being well shown. Gray matter of the brain has been found, and, in fact, all portions of the hypoblast and mesoblast have been found. J. is lead to believe that the simple variation of the cyst is the fault of the Graafian follicle, but the formation of the dermoid is due to the ovum, which is retained, and in some way or other produces this formation.—*Cincin. Lan.-Clin.*, Oct. 15, 1892.

**How Do You Pronounce "Quinine?"**—This question is discussed in the *Popular Science Monthly* for September. It would be interesting to know in how many ways this word is pronounced by the members of the profession. Webster's International gives three forms, *Kwi' nin*, *Kwi' nin* and *Kwi' nen*; the Century gives two of these and adds a fourth form; while Stormonth gives the fifth variant. In the midst of all this confusion what shall we do? The Chemical Section of the American Association for the Advancement of Science made a report recently on the proposed revision of the spelling and pronunciation of chemical terms. Among the decisions was one which especially refers to *quinine*. The committee recommend a sixth pronunciation for this puzzler. We are now to ask for *Kwi' nin* and are to spell the word *quinin*. Probably a reform in the spelling of such words as diarrhoea, phthisis, pneumonia, ptialism, etc., would be welcomed by the profession. Silent consonants could be omitted and the *æ* replaced by *e*. There

is a growing tendency to simplicity in all such matters.—*Nat. Med. Review*, Oct., 1892.

**Shattinger (C.) on Rumination in Man.**—The symptoms of rumination in man are neither numerous nor complex. Without nausea or retching, the party affected will repeatedly regurgitate portions of food, which returned to the mouth, may or may not be re-swallowed. The regurgitations usually begin soon after eating, and generally continue for a considerable time, sometimes as long as the stomach contains food.

The conditions with which *merycismus* might be confounded are, *pyrosis*, nervous vomiting and tubular or sacular dilatation of the *œsophagus*. In *pyrosis* the ejected material is always a watery fluid with no or but slight admixture of food; it has an acrid taste and is almost invariably preceded by heartburn. Many cases of nervous vomiting will be readily distinguished by premonitory nausea and the occurrence of noticeable efforts at expulsion. When these are absent we have a guide in the capriciousness which is characteristic of nervous vomiting; taking place now at one stage of digestion, now at another, sometimes even when fasting; now causing the rejection of the simplest food, and again allowing the retention of the least digestible articles. Moreover, this kind of vomiting is much influenced by anything productive of nervous perturbation, such as pregnancy, menstruation, the various emotions, etc. It is also commonly a reflex phenomenon of which the causative focus of irritation is perhaps discoverable. But an unmistakable difference between nervous vomiting and rumination lies in the fact that in the former affection, the whole or the greater part of the gastric contents are thrown out by a single expulsive act, while in the latter disorder, only portions of the food ascend at intervals into the mouth. The regurgitation incident to dilatation of the *œsophagus* takes place a longer time after eating than is usually the case in *merycismus*. This is especially true of saccular dilatation when pronounced. Here food often accumulates for days in a diverticle before being regurgitated. The ejected substances have an alkaline reaction, often are mixed with tenacious mucus and will probably be fermenting or even putrescent. Patients so afflicted have offensive eructations and a fetid breath. In nearly all of these cases there will be added symptoms of stricture,

which latter, together with sacculation, may be demonstrated beyond question by instrumental exploration.

The prognosis of rumination is doubtful. There are mild forms which can be suppressed by mere force of will, and there have been cases which terminated in *phthisis* or *marasmus*.

Treatment must be a generally invigorating one with due regard to nervous *erethism*, if a factor in the case. Small meals at frequent intervals and a dry diet will benefit some. Rest after eating, in the horizontal posture or lying on the right side, is to be recommended to all. Sea-bathing, hydrotherapy, massage and electricity will accomplish more than drugs. Direct faradization of the *cardia* is a rational procedure which may have to be resorted to in particularly obstinate forms of the disease.—*Med. Fortnightly*, Oct. 1, 1892.

**Johnson (I. T.) on Transposition of the Viscera.**—Mrs. M. E. B., aged forty-nine, died of uterine cancer, April 23d last, and for certain reasons the coroner ordered an autopsy, which I, as coroner's physician, performed the next day. I found the following rare arrangement of the internal organs:

The right lung had two lobes, and the left lung three.

The heart was on the right side of the spinal column, occupying the same position relatively that it should have on the left side.

The arch of aorta turned to the right, and the thoracic portion descended on the right side of the median line. The innominate arose from the left side of the arch, and the common carotid and subclavian from the right side.

The position of stomach was reversed, the cardiac end lying to the right of the median line, and the pyloric end to the left. The position of the several portions of intestine was the reverse of the usual.

The spleen was on the right side, and the liver on the left.

The vermiform appendix occupied the same relative position on the left side that it should have occupied on the right.

In fact, it was a case of complete transposition of all the internal organs, though the ureters, kidneys, and some other parts which would require a more thorough investigation to determine whether they were transposed or not, were not examined as

closely as they should have been with regard to that point. The woman had always been right-handed.

Physical examination of a daughter aged sixteen years, and of similar disposition and appearance as the mother, did not disclose any abnormal position of the internal organs.—*N. Y. Med. Record*, Oct. 1, 1892.

**A New Test for Glanders.**—The appearance of glanders in London and in this city lends special interest to recent bacteriological studies of this disease, which have resulted in furnishing a diagnostic test. A year and a half ago, Dr. Kalning, of Dorpat, announced that he had prepared an extract from the bacillus of glanders (*b. mallei*) which caused a febrile reaction when injected into infected animals. Dr. Kalning unhappily caught glanders and died in the course of his experiments. Dr. Preusse, of Dantzic, Dr. Pearson, of Berlin, and Professor Nocard, of Paris, all working independently, have reached similar results to those of Dr. Kalning. Preusse's method has been most largely followed and tested (*British Medical Journal*). He used old, dried-up cultures of the bacillus mallei grown on potato; these he steeped for several days in a mixture of water and glycerine (equal parts), at the temperature of the body. The extract he filtered several times, and sterilized in the steam bath. It was finally an imperfectly clear, dark yellow, oily liquid, of neutral or faintly acid reaction; it possessed a characteristic odor. Preusse tried the action of this extract on six horses belonging to certain large stables in which glanders had just previously broken out; none of the six horses, however, showed at the time of his experiments any unequivocal sign of being themselves glandered. All but one showed febrile reaction in five to fifteen hours. The horses were killed in twenty-four hours and all those which had had the fever showed the unmistakable evidence of glanders.

Altogether 64 horses have been tested by Preusse's method. Of these, one animal was obviously at the time of injection glandered, but the remaining 63 showed at that time no definite symptoms of the disease. In 41 of the horses a first injection of mallein was followed in about eight hours, and a second in about four hours, by an elevation of temperature altogether above the limits of the normal. In 23 horses no rise of temperature whatever

followed the injection. Every one of these 23 cases proved on post-mortem examination to be completely free from anatomical signs of glanders. Of the 41 horses which gave a febrile reaction after injection, 38 were found by post-mortem examination to be actually glandered, but in 2 of the 41 the most careful scrutiny failed to reveal any signs at all of a glanderous condition. The test has been used somewhat in London, but not yet with perfect satisfaction. If the disease spreads in this city or neighborhood it is to be hoped that some of the testing extracts will be tried.—*Ed. N. Y. Med. Record*, Oct. 15, 1892.

**Jones (A. A.) on Right Hemiplegia and Aphasia Following Diphtheria in a Child.**—In May, 1891, I attended Florence T., eight years old, during a severe attack of diphtheria. The local and constitutional manifestations of the disease were pronounced, but the patient passed safely through the severe stages, and in about ten days was free from pyrexia, had a clean throat and a good pulse. The child seemed so well that I ceased making daily visits. One morning, however, I was hurriedly called, and found her with complete right-sided hemiplegia and ataxic aphasia. The right side of her face was entirely paralyzed. Her mother informed me that the child was talking and laughing an hour before I was summoned.

She was not unconscious at any time. The usual evidences of pharyngeal paralysis existed. No cardiac bruit was detected. The patient's mentality seemed sluggish for a few hours subsequently to the attack, but thereafter was normal.

Her repeated attempts to make herself understood were unavailing, as she produced only inarticulate sounds. Sensation was normal, so far as I was able to elicit. The patellar reflex was very weak and alike on both sides. Headache was not present. No pain was felt in any part of the body. After the lapse of two days, she was able to extend, but not to flex, her leg. Motor power gradually returned, first in the leg and thigh, then in the hand and arm, lastly in the face and pharynx. In about six weeks the little patient was playing out-of-doors, apparently as well as before her illness.

A few days ago I went to see her, and was struck by her frail appearance. She has grown very little if any. She is very thin. Her eyes are large and her pupils

dilated. No areas of anæsthesia were found. Her patellar reflexes on both sides were almost imperceptible. Her sister states that the child has always spoken slowly since her illness. Her grandfather states that she has never been the same since, but is weak in body and mind.—*Phil. Med. News*, Oct. 22, 1892.

**Regimen in Bright's Disease.**—A recent communication from Dujardin-Beaumetz to the French Academy of Medicine states that in chronic nephritis the quantity of albumen excreted is of secondary importance. In point of prognosis the permeability and power of elimination of the kidney are of chief moment, and upon these alone can prognosis and treatment be based. The first thing to be done is to facilitate the elimination of toxins, and to lessen their production as far as possible. Elimination is aided by diuretics, purgatives, and stimulation of the functions of the skin. Proper diet and intestinal antiseptics lessen the production of toxins. Benzoate of naphthol is the best intestinal antiseptic, and a vegetable diet is best suited to sufferers from chronic nephritis. Fish, shell-fish, and fermented milk rapidly produce toxic ptomaines and are, for this reason, to be strictly avoided. In a general way, it may be said that meat, especially game, and all kinds of preparations of pork, salaisons, fish, shell-fish, and old cheese are injurious. To this list may be added alcohol, which irritates the kidney and diminishes its power of elimination. Vegetable diet includes milk and its preparations, eggs, cereals, fresh vegetables, and fruit. In recent German discussions some exception has been taken to eggs, not on the ground this time that they increase albumen, but because they augment the amount of retained urea. The question is: Can uræmia be prevented by abstinence from nitrogenous food? The answer is negative, in spite of the fact that non-nitrogenous diet is often advantageous in acute nephritis, though useless in chronic disease of the kidney. Dujardin-Beaumetz believes that this vegetable, or rather non-meat diet will greatly prolong life, and that it should be earnestly recommended in all cases of Bright's disease.—*Ed. N. Y. Med. Record*, Oct. 22, 1892.

**Sayre (R. H.) on Carcinoma of the Breast Following Traumatism.**—At a recent session of the New York Patho-

logical Society, Dr. Sayre presented gross and microscopical specimens from a case of carcinoma of the breast, which gave a rather strange history. The woman was thirty-eight years of age, and the chest-walls indicated that she had been the subject of rachitis in her youth. There was no family history of malignant disease, except that the grandfather had had an epithelioma of the lip. In November, 1890, while carrying a heavy load of dishes, she fell, and was struck in the thorax by some of the falling dishes. She was examined by a physician, who expressed the opinion that she had sustained a fracture at the junction of the costal cartilage with the fourth rib, on the right side. In May, 1891, she again fell and injured the breast on the right side. This was followed by pain in this breast, and the appearance of a line of induration and swelling extending from the site of the first injury down to the nipple. Some time after this she also noticed a small nodule in the lower part of the breast. In March, 1892, after a slight blow on the same breast, thick yellowish pus began to discharge from the nipple, and this continued up to the time when she first came under the speaker's observation. An examination of this discharge showed no tubercle bacilli present. The breast was removed, together with one enlarged axillary gland. There was a small nodule in the lower part of the gland, and another in the upper portion. Below the pectoralis major muscle was a sinus containing pus, and leading up to the fourth rib, where there was some dead bone. Another sinus extended from this point to the nipple. Microscopical examination showed the nodules in the breast to be carcinomatous. The case was interesting on account of the possible connection between the traumatism and the development of the carcinoma.—*N. Y. Med. Record*, Oct. 15, 1892.

**Lloyd (S.) on the Operative Treatment of Tubercular Lymphadenitis.**—Paper read before the New York County Medical Society: In the cases of enlargement of the glands in the neck, which had appeared at his clinic, he had looked upon the condition as one of local tuberculosis, and tried to trace the place of entrance of the tubercle bacilli. This might be in disease of the scalp, of the external auditory canal, the pharynx, etc., but the most common seat of entrance was in the mouth or nose, from decayed teeth, ulcerated

gums, tonsillitis, rhinitis. Whenever the point of origin for the disease could be made out with certainty, one found the glands nearest thereto most advanced in tubercular change, and giving the impression that they had been the first attacked. These glands also often showed a larger number of tubercle bacilli than those farther away. Often, however, one's examination failed to reveal the origin of the disease. Occasionally there was a family history of tuberculosis. Often the enlarged glands followed one of the eruptive fevers, or a cold in the head, or sore-throat. In no case had he been able to make out a primary pulmonary invasion, in spite of the statement which had been made that the lungs or bronchial glands were usually the starting-point of the disease. A further proof that the bronchial glands were not the usual starting-point was the fact that removal of the cervical enlarged glands often ended its progress. The bacilli varied in number, according to the size and extent of involvement of the glands.

Clinically, four stages or classes might be recognized: 1. The simple inflammatory stage without degeneration, but with distinct local points of infection. 2. Simple glandular enlargement, without recognized points of infection, and with or without a distinct tubercular history. 3. Degenerated glands. 4. Calcareous glands of small size—hard tubercles.

The cases in the first stage—the simple inflammatory—were the most satisfactory to deal with, for removal of the infected areas and paying attention to the constitutional condition often gave complete relief. No external applications should be made; decayed teeth, etc., should receive attention, and should relief not be prompt, extirpation of the enlarged glands should be undertaken. A careful physical examination should be made in every case. The second class of cases required essentially the same management. In cases where the glands were large but not ulcerated, absorption could sometimes be caused to take place by injections, as of carbolic acid, iodine, chloride of zinc, iodoform in ether, glycerine, or in olive-oil. The author had used iodoform in glycerine, ten per cent. of the former; the bottle stood in boiling water. The amount injected depended upon the age of the patient and size of the gland, varying from five minims to half a drachm; was gradually increased, and

employed two or three times a week, but not always in the same gland. Strict asepsis must be observed. Rapid absorption often followed, and in one instance commencing constitutional infection manifested in the lungs promptly disappeared.—*N. Y. Med. Record*, Oct. 8, 1892.

**Bailey (S.) on Dupuytren's Finger Contraction.**—The history of a case is narrated having two unusual features. The patient was a woman of good social position and sixty-seven years of age. While there was no pain connected with the contraction, she was annoyed and depressed by constantly recurring inconveniences. To comb the hair, to change the dress, to lift a weight, to write, in fact to perform any manual duty was a burden, if not an impossibility. The thumb on the right hand was drawn to the middle of the palm, motion was only possible between the first and second phalanges.

The fascia of the palm and the fibrous tissue of the inside of the fingers of this hand were diseased in a somewhat higher degree than on the left. But she was bad enough off in both members, so that life was hardly worth living. [Patient died from pneumonia before an operation had been decided upon.]

Gout and rheumatism could be excluded in the case. The patient never remembered having had an inflammation, either acute or chronic, in the palmar aspect of the hand.

She had contracted specific disease from her husband, and it was believed that the interference produced by it with the nutritive processes was the exciting cause of the finger contraction.—*Am. Pract. and News*, Aug. 27, 1892.

**Given (J. C. M.) on Acute Thyroiditis.**—M. B—, a nurse aged twenty-three, was taken ill suddenly on April 5th, 1892, with general malaise and pain in the neck. That evening her neck began to swell, her temperature rose to 105.3°, and she complained of difficulty in swallowing and breathing. Next morning, on examination of the thyroid region, there was found to be a large tense swelling extending laterally to the sterno-mastoids downwards to within an inch of the sternum; above it was limited by the hyoid bone, which could just be felt, but on each side of that structure it extended upwards to the angle of the jaw and the mastoid process. On palpation it was exceedingly tense, non-fluctuating and very tender to the touch, and did



not move on deglutition. The enlargement was of such a size that the patient could scarcely separate her teeth, and that the normal depressions over the anterior triangles and the prominence of the thyroid cartilage were completely obliterated. Deglutition was extremely difficult and there was occasional inspiratory stridor. The fauces were slightly congested, but otherwise normal. The patient was evidently very weak. Pulse 140, soft and small. On April 7th the general condition was rather better; temperature 102°. The swelling was now fairly localized to the thyroid gland, and moved slightly on swallowing. The difficulty of deglutition was much less and the inspiratory stridor was absent. On April 8th the enlargement had slightly decreased, but some subcutaneous œdema, most marked on the right side, had appeared; there was no redness of the skin and no definite fluctuation, and as the urgent symptoms were abating, the surgical interference, which at first was thought would be necessary, was postponed. Leeches were applied, and the hot fomentations which had been used from the commencement were abandoned. After this the patient steadily improved; on April 14th the swelling was almost confined to the right lobe of the thyroid, which was still tense and tender and semi-fluctuating. The measurement round the most prominent portion of the neck was fifteen inches and a quarter. The temperature still went up to 101° at night. On April 21st the swelling had sensibly decreased, neck measurement fourteen inches, and the patient had been getting up for a little time each day, her temperature being normal. On May 24th she came back, having been away for a change, and stated that she felt quite well. The measurement of the neck was thirteen inches, and she now wears the same collars that she did before the attack.

The treatment adopted was expectant. The two great difficulties were, first, to diagnose the trouble in the first forty-eight hours from a diffuse cervical cellulitis; and secondly, to determine in the later stage whether pus was forming in the thyroid. Fortunately this did not occur. She was freely fed with nourishing food and was ordered ten minims of tincture of perchloride of iron every three hours. It appears that before the attack she had always a slight fulness of the front of the neck, but it was so slight that it had never been

noticed by her friends. The exciting cause is unknown, there having been no definite exposure to cold; but with regard to the predisposing cause it is interesting to note that the patient had had acute rheumatism, which disease was said to be in close relationship to such cases as those related by Dr. Angel Money at the Clinical Society in 1887, when the only other similar case I can find reported was read by Dr. Barlow. —*London Lancet*, Oct. 22, 1892.

**Williams (J. W.) on a Case of Malformation of the Heart.**—On July 18, 1892, H. S., a boy ten months old, was brought for treatment to the Out-patient Department of the Paterson General Hospital, where he was seen by Dr. J. R. Merrill and myself. The child's mother, a healthy woman, stated that when the child was born its respiration was so long delayed that its life was despaired of. She also stated that ever since its birth the child had had attacks of dyspnoea and partial syncope, attended with marked cyanosis, coming on so suddenly and being of such short duration that she had never summoned a physician. These attacks had been often repeated at varying intervals.

On examination, the child was found to be fairly well nourished, rather fretful and apprehensive. There was marked cyanosis of the nose and adjacent parts of the face and of all four extremities. Elsewhere the skin was pale and dull in hue. Examination of the chest showed the breathing to be somewhat accelerated. The cardiac impulse was rather forcible and diffuse, so that the apex-beat could not be accurately located. The action of the heart was rapid but regular. No distinct murmur could be heard, the only peculiarity noted in the heart-sounds being a sharp "click" heard before the systole. The diagnosis of a patent foramen ovale was made and an appropriate prognosis given.

The child died August 28. An autopsy was made, and the following abnormal conditions were found: The heart was in the right side of the chest, with the apex in the right mammary line on a level with the sixth rib. There were two auricles, but only one ventricle. There was no pulmonary artery. The other large vessels were quite normal. The foramen ovale was patent. The wall of the single ventricle was about one-eighth of an inch thick and almost uniform throughout. A slight trace of the septum between the

ventricles could be seen.—*Phil. Med. News*, Oct. 8, 1892.

**Hedden (J. W.) on Purulent Pericarditis.**—The writer thus describes an operation recently performed for the cure of this condition. The patient's symptoms were typical ones, viz., dyspnoea, cyanosis, bulging of chest-wall, faint heart sounds etc. Hedden says :

We rendered the parts thoroughly antiseptic and made an incision about three inches in length in the fifth intercostal space, and carefully dissecting through the intercostal muscles, we came upon the pericardium, seizing it with a Tooth Volsella, drew it into the intercostal space, made a slight incision with a sharp-pointed knife, then introducing a probe-pointed pair of scissors, we opened the pericardium half an inch or more, when 13 ounces or more of purulent fluid escaped, the odor of which was extremely disagreeable. After using a dull curette we washed the cavity thoroughly with an antiseptic iodine solution ; we then closed the pericardium with catgut sutures and dressed the wound antiseptically. At the end of ten days, on removing the dressing, we found perfect union by first intention. To render the parts anæsthetic we used a 4 per cent. solution of cocaine, injected into three different parts in the line of incision ; being afraid to induce anæsthesia by the usual means, because of the condition in which both his heart and lungs were at the time, and also because of the fact that he was unable to take a recumbent position.

The relief the operation gave him was so perfect and immediate that he was able to lie down for the first time for nearly four months. He slept well and his recovery was uninterrupted ; in less than three weeks he drove to his place of business.—*Med. Herald*, Oct., 1892.

**Finley and Ross (P.) on Angina Pectoris, Acute Aortitis, and Stenosis of the Coronary Arteries.**—The specimens were exhibited before the Montreal Medico-Chirurgical Society, and were removed from a large-framed, muscular man, aged thirty-three, with slight œdema about the ankles. The heart was enlarged and flabby, weighing 445 grammes. The wall of the left ventricle was three eighths of an inch thick, pale, and somewhat soft, its cavity dilated, and measured  $4\frac{1}{2}$  inches in length, and the mitral orifice 4 inches. At the root of the aorta, extending above the valves for

about 1 inch, the intima was much thickened and gelatinous-looking, and was sharply divided from the rest of the ascending aorta, which was healthy, by an irregular line. The orifice of the right coronary artery was greatly contracted, and the left was also considerably smaller than usual, whilst the vessels themselves were normal beyond the contracted orifice. The descending aorta presented a few gelatinous raised plaques. With the exception of two old infarcts in the spleen, the other organs were healthy. Microscopically the intima of the aorta was much thickened by an infiltration of small round cells, and there were also irregular patches of small round cells in the media. The striæ of the heart muscle were indistinct, and the fibres granular but not fatty. The liver showed slight pigmentation about the central vein. The small vessels of this organ and of the kidney were normal.—*Montreal Med. Jour.*, Oct., 1892.

**Mackenzie (H. W. G.) on Chronic Pulmonary Phthisis in Later Adult Life.**—Conclusions are :

1. The disease, while relatively less frequent than in early adult life, is still not uncommonly met with.

2. It more commonly attacks males than females.

3. The influence of heredity, although less marked, can still be traced in some of the cases.

4. The disease is essentially chronic in form.

5. It is in a considerable number of cases limited to one lung.

6. Tubercular disease of the larynx and intestines is found in as great a proportion of the fatal cases as in earlier life.

7. The onset is usually insidious.

8. Cough with emaciation and debility should always suggest the possibility of phthisis in an elderly person.

9. Hæmoptysis is less frequent except in the later stages, when there is considerable risk of profuse and possibly fatal hæmorrhage.

10. The symptoms of disease are sometimes quite misleading, being abdominal in type, suggestive of malignant disease, and generally arising from intestinal or peritoneal tubercle.

11. Sometimes the physical signs are best marked at the apex posteriorly.

12. Sometimes the disease is complicated with chronic bronchitis and emphysema

which mask the physical signs, and then is easily overlooked, unless the sputum is examined for bacilli.

13. The duration of the disease is essentially protracted but difficult to determine clinically, on account of the gradual onset of the illness.

14. The maintenance of strength and nutrition, and the quietness of the pulse are most encouraging as regards prognosis, while the opposite and the occurrence of complications are of grave omen.—*Med. Press and Circular*, Oct. 5, 1892.

#### Johnston on Chlorosis in a Male.

—At a recent meeting of the Montreal Medico-Chirurgical Society, Johnston gave some notes on the examination of the blood of a man who was intensely anæmic, with a sub-icteroid hue. The number of red and white corpuscles were found to be normal, but the hæmaglobin was reduced one third. The case was one of pure chlorosis, which is quite a rare condition in a man. The man had been ailing for a year and a half, and had suffered severely from hæmorrhoids. After using ten Bland's pills daily for a week, the hæmaglobin rose from 30 to 55 per cent., and at the end of the second week it was over 70 per cent., when he was lost sight of. He was a day laborer, and his occupation offered no clue as to the cause of the chlorosis.—*Montreal Med. Four.*, Oct., 1892.

Reid (R. A.) on the Detection of Pulmonary Tissue in the Sputum of Phthisis.—Some of the most common ingredients of expectoration, which may be mistaken for elastic tissue, are cotton or linen fibres, derived from sheets, pillow-cases, etc. These, when shaken, give off minute particles of their structure that are inhaled as dust and expectorated again in the sputa; such microscopical fragments often split up at one end, and assume the Y-shape mentioned by some authorities as characteristic of pulmonary tissue, but they very rarely present the appearance of a third fibre crossing from one extremity to the other of the arms of the Y.

Another difference between the two substances is, that individual fibres of the elastic tissue in general may be perfectly distinguished, even when bound together with the membrane from the wall of the air vesicle, whilst an unsplit flax filament rarely shows distinct component fibrillæ. The characteristic of abruptly broken fibres already referred to is especially valu-

able in diagnosing true elastic tissue from filaments of cotton or flax.

A second usual constituent of the sputa, liable to be mistaken for lung structure, is the starch corpuscle from bread, potatoes, etc., whose transparent cell-wall, after boiling, presents no indistinct analogy to the pulmonary air vesicle, which it approaches in magnitude, whilst the delicate branching folds, into which it is commonly thrown, may readily be taken for fibres, which they resemble in size; these folds, however, are generally too pale and too few in number to counterfeit elastic tissue from the lungs, and close scrutiny, with careful management of the light, will almost always reveal the oval membranous sac of which they form a part. In cases of doubt, this may be brought into view by coloration with aniline solution.

Substances of vegetable origin, such as fragments from various fruits, seeds, leaves, and other articles of food, from tobacco used for chewing, etc., often exhibit a network of branching fibres, presenting the general aspect of elastic tissue; but the cells of such structures, when of smaller size than the pulmonary air vesicles (that is, less than one hundredth of an inch in diameter), are generally composed of single filaments, and, when larger, with thicker walls, rarely present the appearance of two or three parallel fibres united by a delicate membrane, so common in lung tissue.—*Mass. Med. Four.*, Oct., 1892.

#### Blackford (C. M.) on Tetanus.—

The paper was read before the Virginia State Medical Society and received a prize of one hundred dollars. Blackford defined tetanus to be an acute, infectious disease, characterized by tonic contractions of the muscles of mastication. The following were his conclusions: 1. Tetanus consists essentially of a tonic spasm of certain muscles, which have been thrown into a state of physiological tetanus. 2. This is caused by an abnormal irritability of the reflex centres in the medulla and cord. 3. This hyperæsthesia is the result of the physiological action of certain ptomaines, or alkaloids of decomposition, formed in the wound, and absorbed therefrom. 4. These ptomaines are the result solely of the growth of a specific bacterium called the bacillus of tetanus, or the "bacillus of Nicolaier." 5. Tetanus is, therefore, a toxic disease, caused by the infection of a wound by this specific bacterium or its products.

As to treatment, "An ounce of prevention is preferable to the pound of cure." At once explore the wound and clean it of all foreign substances with scrupulous care. Open the recesses of the wound and apply a germicide. Iodoform or aristol should be freely used because of their undoubted power to destroy the ptomaines—perhaps through the iodine they contain. Corrosive sublimate and carbolic acid remain our chief aids in rendering the wound surgically clean, and should be used first, the iodoform or aristol being used after disinfection. If tetanus occurs after this disinfection then the wound has been contaminated as a result of some omission or commission on the part of the surgeon. The prevalent idea that wounds of the hands and feet are peculiarly liable to be followed by tetanus is due to the fact that the hands and feet are more liable to become dirty and are more difficult to cleanse.

Should the attack commence, the first indication is to stop the formation of the ptomaine. To do this the wound should be opened and disinfected by means of a solution of corrosive sublimate ( $\frac{1}{100}$  ths or  $\frac{1}{1000}$  ths), by the use of which the shock incident to the curette or cautery is avoided. To avoid peripheral irritation as far as pos-

sible, the room should be absolutely quiet. The bed-clothes should be light, and, if practicable, supported by a frame above the patient so as not to touch him.

The speaker mentioned a number of drugs that have been used with more or less success, but held that the chief reliance should be on physostigma. A third of a grain of the extract subcutaneously, or a grain by the stomach every two hours, is enough to commence with. The subcutaneous use of salicylate of physostigmine is a more elegant mode of administration, and by this means the pain and spasm which attend the effort to swallow are avoided. Tetanus antitoxine, discovered by Tizzoni and Cattani, has been used successfully hypodermically to cause immunity from the disease, even in highly susceptible animals. Even the blood-serum of these immune animals is antitoxic, and produces immunity against, and cure of, the disease. Tetanus antitoxine may be produced in a solid shape by adding alcohol to the serum of an inoculated animal, and evaporating *in vacuo*. Schwartz relates the case of a boy, fifteen years of age, treated by him; and says that Gagliardi, of Molinella, treated successfully a severe case by hypodermic injection of one gramme.—*N. Y. Med. Record.*, Oct. 8, 1892.

## BOOK NOTICES.

**Atlas of Clinical Medicine.** By Byron Bramwell, M.D., etc. Vol. II., Part I. Edinburgh: T. and A. Constable. 1892.

The present part is fully up to that standard which has scored such signal successes for its predecessors. It treats of Scrofula, Unilateral Hypertrophy of the Skull, Measles, Friedrich's Ataxia, and Alterations in the Field of Vision. The plates illustrate these topics, and especially lesions of the brain in cases attended with various visual disorders.

Nothing but the highest praise can be given for the letter-press, typography, and every detail of this monumental enterprise. It marks an era in the art of producing treatises on medical subjects.

**Medical Jurisprudence and Toxicology.** By Henry C. Chapman, M.D., Professor in Jefferson Medical College, Philadelphia. 12mo. Pp. 237. Thirty-seven illustrations, some of which are colored. Philadelphia: W. B. Saunders & Co. 1892.

The author was a coroner's physician for six years, and therefore is acquainted with his subject from a thoroughly practical standpoint. This manual embraces the substance of his annual courses of lectures in Jefferson College. Its style is clear and concise. It is a good work to read preparatory to the more exhaustive treatises on the same topic. The wood-cuts are of unusual clearness. The type is excellent and the index complete. It is a good work for students and those beginning the practice of medicine.

**The Students' Quiz Series.** Published by Lea Brothers & Co. Philadelphia, 1892. Series edited by B. B. Gallaudet, M.D., New York. *Gynecology*, by G. W. Bratenahl, M.D., and Sinclair Tousey, M.D., New York. *Obstetrics*, by Charles W. Hyatt, M.D., New York. *Practice of Medicine*, by Edwin T. Doubleday, M.D., and J. Darwin Nagle, M.D., New York.

Of students' manuals there seems to be no end, especially during the present year of grace. Nearly every firm of medical publishers has come forward with a series of claimants for public favor. The series of Messrs. Lea Brothers is edited and written by representative members of the younger generation of medical men in New York. They are arranged in the form of questions and answers, and are replete with practical information. The authors have carefully sifted out the essentials from the non-essentials, and have produced a series for which we predict a large sale.

**Essentials of Materia Medica and Prescription Writing.** By J. Aubrey Davis, M.D., etc. Philadelphia: P. Blakiston, Son & Co. 1892.

The salient points of prescription writing are here presented in succinct form. The classification and arrangement followed is that of H. C. Wood's *Therapeutics*, which is a standard text-book in so many institutions. Blank interleaves increase the value of the book for student purposes. Nothing is said about therapeutics.

# THE EPITOME OF MEDICINE

A MONTHLY RETROSPECT OF PROGRESS IN ALL BRANCHES  
OF MEDICINE AND SURGERY.

A CONTINUATION OF THE MEDICAL ANALECTIC AND OF TOWNSEND'S EPITOME OF MEDICINE

EDITED BY J. E. NEWCOMB, M.D.

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## LEADING ARTICLE.

IS THE DISPENSED TINCTURA FERRICHLORIDI ALWAYS FAULTLESS?

BY FERDINAND LASCAR, PH. GR.

The employment of iron in medicine dates back more than 5000 years ago. At that early period we are told that through its employment in the form of iron-rust, Melampus cured the son of Philacus, the prince Iphicles, radically of his impotency. Ever since then the preparations of iron have in endless numbers found employment in medicine; their extended use has been such that of all medicines of an unorganic origin the iron preparations have been the most prescribed and remain so to-day. But of all preparations of iron known none have become so important as our officinal tincture of sesqui-chloride of iron.

That such a much-prescribed medicine as the tincture of sesqui-chloride of iron, which possesses specific properties in certain diseases, should be of a standard strength is much desired, it being often relied upon as the only available iron preparation in extreme cases, and for this reason it is important that the tincture should be prepared strictly in accordance with the directions of the Pharmacopœia. The formula given there has been devised after much labor and experimentation; the formula found in older editions of the Pharmacopœia has been revised in the present one, and I firmly believe that a tincture strictly made according to the formula given us now is as perfect as reasonably can be expected. I have found that any deviation from said formula yields a much less perfect tincture and will not stand the tests as well as the officinal tincture will.

This is required to contain all the iron in a sesqui-chloride combination. In the Pharmacopœia of 1850, the tincture was made from the hydrated sesqui-oxide in which remained some "ferrous carbonate," which led to that in the tincture more or less. "Ferrous chloride" of course appeared, which again caused such a tincture after a while showed a deposit of ferric oxide and then became weaker. Again in the later editions the process of making the tincture was improved upon, and a new preparation, the liquor ferri chloridi, was taken up. Presently it is ordered that the tincture should be of a specific gravity of 0.980, and that on the addition of freshly prepared test solution of potassium ferri-cyanide the color should merely change to a greenish brown without a trace of blue. While the latter test rarely holds good, yes, is almost impossible to meet, there are no reasonable grounds why a tincture of sesqui-chloride of iron when prescribed by a medical practitioner should not be of a standard strength and of the ordered specific gravity. That this, however, is far from being the case is told us by Dr. Elliott, who stated in commenting upon a paper read by Dr. Reynold W. Wilcox on a new iron preparation, before the New York Academy of Medicine, April 19, 1892, Dr. A. A. Smith in the chair, "that he had obtained from various places in this city a number of samples of tincture chloride of iron from pharmacists who were *reliable*. The actual amount of the solid chloride of iron aver-

aged from 8.6 to 14.7 per cent., so one could imagine what the preparations were. According to the Pharmacopœia of the United States tincture of chloride of iron should contain about thirteen per cent." I admit I was taken aback in reading Dr. Elliott's statement, and hope for the fair name of the college he affiliates with that it has not turned out many such *reliable* pharmacists as those from whom he procured such faulty preparations. The Doctor stated further that the tinctures procured were not alone deficient in contained iron, but were otherwise wrong; he stated further: "The acid over and above that necessary for the solution of iron in it—for it must be remembered that metallic iron required a certain amount of hydrochloric acid to clear it—averaged from nothing in one to a sample which contained ten per cent. more than is necessary." This is truly a serious state of affairs when we consider the fact that, while we have a multitude of other iron preparations, there are certain cases daily met with in practice where no other iron preparation can possibly be substituted for the tincture, because the action of the tincture in specific cases is not alone due to the contained sesquichloride of iron, but also to the products created in the tincture by the action of hydrochloric acid alone, or in conjunction with the sesquichloride upon alcohol. That in devising the formula for the tincture in our present Pharmacopœia the Commission having this work in charge has been fully cognizant of this fact, is shown by their directing that the tincture after being prepared should be kept at least for three months before being ready to be dispensed. As the aging process of whiskey, brandy, and other strong alcoholic liquids, especially when an acid is present, consists in the formation of ethers, so are ethers produced in tincture of iron, and that a freshly prepared tincture is at variance with one which has been kept for months the taste and the odor will easily demonstrate it. Again it stands to reason that in a tincture containing little hydrochloric acid, a less amount of such ethers is produced than in one which contains a much higher percentage, and that further the effects of such a preparation, albeit the difference of contained acid, is at variance with the perfect tincture. No practitioner will deny that it very frequently takes no mean diagnostic skill to select the proper iron preparation for

the patient, for in some instances acid and in others alkaline preparations are indicated; in some instances a lack of hæmatin in the blood might be present, while in other cases where the process of alimentation being impaired a preparation of iron is required to correct this, and so many conditions may be quoted where one iron preparation will not answer where others will. But when an iron preparation is indicated which possesses the specific astringent properties as the official tincture does, for its specific action in urinary and throat diseases, the practitioner looks in vain for an iron preparation to substitute for the tincture, and for this very reason it is all important that the tinctures dispensed should be of a uniform strength both in contained iron and otherwise. A tincture, for example, which contains, as it should, only the sesquichloride will act differently from one which contains much protochloride; as far back as Jan., '77, in *Braithwaite's Retrospect*, Dr. Bell reports using two different tinctures, of which one undoubtedly contained much protochloride, in a case of erysipelas, and when one containing sesquichloride alone was substituted for the former, the disease yielded in a few days.

That our tincture of iron should be properly prepared ought to be insisted upon, as the preparation according to the Pharmacopœia formula does not offer many difficulties if the ingredients required (the acids) are of the proper strength and if no undue heat or undue haste are employed. The tincture should certainly be of the proper specific gravity and should not be a mélange of ferric and ferrous salt, always remembering that the therapeutic action of both is far from being alike. The almost daily addition of new drugs to the already bountiful number we possess, makes that such old standbys as the tincture sesquichloride of iron often are neglected. We frequently see the tincture prescribed in combinations which impairs its usefulness, yes frequently with incompatible substances, making such compounds nigh inert for the purposes they are prescribed for. Such compounds of the tincture will, as the imperfectly prepared tincture frequently itself does, change in color and become dark; this is due to the sesquichloride being decomposed and leaving a protochloride in the mixture. Often substances are added merely to cover

the acid and astringent taste of the tincture, and in such cases syrups are added in liberal quantities, but even sugar, as well known, is apt to reduce the higher chloride. Such additions are generally made to overcome the taste of the iron, but when the use of the tincture in certain cases is strongly indicated it will find employment regardless of its taste or its action upon the teeth, which latter property often is somewhat overdrawn and overestimated. Caries of teeth is produced by free acids, but it is generally the lactic acid produced in the mouth by the action of ptyalin, invertin, as well as by bacteria upon carbo-hydrates and nitrogenous substances, which by the aid of butyric and acetic acid proves far more destructive even than the hydrochloric. An indisputable fact is it that the processes destroying the teeth are most violently carried on in their cavities and fissures, where streptococci, staphylococci, together with leptothrix buccalis and other microbes wield their pathogenic influences, and I even doubt such bodies can withstand the disinfecting influences of the tincture of iron. That the teeth become black when the tincture is taken does

not prove its destructiveness alone; true the free hydrochloric acid contained therein is hurtful to the teeth, but a rinsing of the mouth with a solution of soda bicarbonate after every dose will overcome this. In prescribing, nothing should be added to overcome the acidity of the tincture, for whatever is added with this object in view will surely decompose the tincture and change its therapeutic properties. This fact should never be lost sight of, nor that at times entirely unscientific preparations are offered the practitioner to take the place of the highly valued tincture, wherein the astringent and disinfecting qualities then are found to have been totally destroyed. It is always well to remember that in certain conditions of the system where iron is indicated almost any rational iron preparation will answer, when the hæmatin in the blood will be increased and more or less nourished, and when the system takes up the amount of iron which it can assimilate, while the balance is as harmless—voided in the stools; but that there again exist cases which imperatively call for the specific actions which only the official tincture of the sesqui-chloride of iron possesses.

## REPORT ON DISEASES OF THE EYE AND EAR.

BY A. T. MUZZY, M.D.

**Syme (G. A.) on Notes on Disease of the Labyrinth in Acquired Syphilis.**—Labyrinthitis due to fever or syphilis has been considered incurable. Two cases due to syphilis are cited by the writer where specific treatment with pot. iodide and McDade's mixture was accompanied by hypodermic use of nitrate of pilocarpin with very satisfactory results. The injections, beginning with  $\frac{1}{10}$  of a grain and increasing rapidly to  $\frac{1}{2}$  and even  $\frac{1}{3}$ , were continued nine and ten weeks.—*Australian Med. Jour.*, May 15, 1891.

**Schmiegelow (E.) on Contribution to the Surgical Treatment of Ear Diseases.**—The paper is confined to the study of suppurative disease of the attic. The acute form of this disease with discharge of pus through Schrapnell's membrane is very rare, occurring in the writer's experience, in 1.6 per cent. of all acute suppurations of the middle ear. This disease may occur alone without suppuration of the remainder of the middle ear. If

these cases are neglected the stagnating pus destroys the ossicles and may perforate the tegmen tympani and result in fatal endocranial disease. Treatment aims at proper drainage by incisions, both through Schrapnell's membrane and below, of good size.

Chronic suppuration here is much more frequent. In dispensary cases the percentage was 5.8, and in private practice 13.5. The latter figure the writer thinks is nearer right for both classes, but is of the opinion that many dispensary cases fail to be recognized from the lack of time to search carefully for the perforation. The higher and smaller the perforation the slower and more insidious is the progress, and the more liable to be followed by sudden violent endocranial or general pyæmic complications. It is often associated with formation of cholesteatomatous masses which erode the ossicles and walls of the attic. Treatment should be very energetic. Ordinary antiseptic injections are of no avail. In-

jection should be made with a Schwartze or Hartmann tympanic canula with enlargement of the perforation and use of solid caustics. In the fifty-four cases reported twelve were not heard from, sixteen were cured, eleven improved, and fifteen gave a negative result. In twenty cases excision of malleus and incus with the drum was performed. In fourteen the malleus was found carious. In all the incus was affected. In nine of the twenty cure of the condition was reached, in eight improvement, in two no effect, and one disappeared. As regards function, hearing was more or less improved in ten cases, in six it remained as before, and three cases a slight diminution was made out. Sometimes failure after this operation is due to accompanying affection of the mastoid. In four of the twenty cases the writer chiselled and scraped the mastoid cells as well. The author favors Stack's operation in which by a curved incision behind and above the ear the auricle is lifted away and a better view and more room are secured for operating.—*Arch. Otol.*, vol. xxi., No. 4, 1892.

**Barr (Thos.) on a Striking Case of Simulated Deafness.**—A servant girl 16 years old was treated for six weeks for absolute deafness with professed tinnitus and professed ability of lip reading. The deafness had existed four weeks before admission. She was carefully watched and treated. Her fallacy was finally proven on catching her sing a song sung by some one of the attendants. Here she claimed to have read the lips of the singer, but she was convinced of the impossibility of this, and in three days admitted full return of hearing.—*Arch. Otol.*, vol. xxi., No. 4, 1892.

**Scheibe (A.) on the Pathogenesis of Transudation into the Middle Ear in Cases of Stoppage of the Tube.**—Other writers as Moos and Kantheck have discovered micro-organisms in the serum of cases of stoppage of the tube. But repeated examinations by the writer have failed to detect them. When communication of the middle ear with the outside air is cut off, the contained air diminishes since the oxygen is taken up by the blood circulating in the walls of the chamber and carbonic acid is not given off in equal volume. The pressure of the air is diminished, resulting in collapse of the drum and membranes of the fenestræ. The blood-vessels in walls of the chamber dilate in consequence. If this continues there commences

a transudation of the serum, and a small number of the corpuscles of the blood, red and white. The viscosity of this serum is said to be due, according to Kessel, to the disintegration of the white corpuscles. If the stoppage continues the removal of the serum is followed by its re-accumulation.—*Arch. Otol.*, vol. xxi., No. 4, 1892.

**Knapp (H.) on a Marked Case of Rudimentary and Displaced Auricle, with Defective Development of the Side of the Face.**—A two-weeks-old boy, the fourth child of its parents and the only one showing any deformity, presents the right side of the head, the opposite being normal, sunken and smaller in all its dimensions. And at a point 35 mm. from the bridge of the nose, instead of 49 mm. as on the opposite side, is a small but rudimentary auricle. Behind this auricle at the point where ear should have been was a shallow depression indicating the orifice of the closed ear.—*Arch. Otol.*, vol. xxi., No. 4, 1892.

**Knapp (H.) on Five Cases of Kerato-conus Treated with Galvanocautery.**—Six eyes in all were operated upon, in five cases. *Case 1.* male, 17 years, healthy, mother had kerato-conus. Reads Sn. 1 at 1' either eye and R  $\frac{1}{8}$  T, L  $\frac{1}{8}$  T. Left eye cocaineized, as all subsequently operated were, then a fine loop at red heat passed over apex of cone 2x3 mm. area, and centre of area pierced. Patient in hospital six weeks. Wound closed and opened seven times, temporary synchthiæ formed. Result, Sn. 1 at 10' and  $\frac{1}{8}$  w—9". Right eye: due to slow progress of left, perforation made small and operation more cautious and prolonged. Severe and protracted reaction, leaving finally a cataract. Needling of cataract six months later gave final vision with +3' of  $\frac{1}{8}$ . Questioning whether the irido-cyclitis, protracted inflammation, and final cataract were not due to the application of prolonged heat, experiments on eight rabbits' eyes were made. These experiments showed that the reaction and the subsequent scar are proportionate to the extent of the cauterization. Moderate burning with or without perforation healed kindly and left circumscribed scars. Extensive and prolonged cauterizations led to intense iritis suppuration and sloughing of the cornea. *Case 2.* Miss A., 32 years of age, kerato-conus following ulcer of cornea, four years ago. Reads L. E. Sn. 6 at 1'. Used at operation a peculiar oval



end plate electrode applied cold and withdrawn as soon as it had been brought to a red heat. Then the centre of the eschar perforated by a fine pointed electrode. No reaction followed; prominence steadily diminished; in eleven weeks read Sn. 2 at 3' and with  $-4\frac{1}{8}$ ". Case 3, Mrs. Dr. W., 46 years of age. Kerato-conus of right. Sn. 1 at 3' and with  $-4\frac{1}{8}$ ". Left normal. After nine years right vision was practically abolished. Cauterization and perforation as in last; no reaction for eleven days. During next four weeks repeated attacks of high tension relieved by pilocarpin; synecthiæ anterior and posterior; iridectomy cutting all anterior synecthiæ; followed by no reaction; discharged in 51 days from operation. Final vision No. 1 at 4' and with  $-4\frac{1}{8}$ ". Case 4, Miss L., about 36 years. Vision failing in both eyes for four years, faster in left than right; R. Sn. 1 at 2 $\frac{1}{2}$ "; L. at barely 1". Operation with oval electrode, no perforation. No reaction. In three weeks recognized time by watch at 10'. Two months subsequently operation repeated at the same spot. Patient discharged in one week. Final vision six months later Sn. 1 at 10' and  $\frac{1}{8}$ " without glasses. Case 5, Miss D., 20, both eyes affected, L. most; vision L. Sn. 1 at 1' and R. Sn. 1 at 3'. Operation same as previous, great pain first night and some chemosis. After second day no further trouble. In a few days watch read at 10' and fingers across the room. Two weeks later, for return of conus, operation repeated. Pain first night, but no further trouble. In three months saw Sn. 1 at 10-12' and with  $-3.D. \odot 1.0$  25' =  $\frac{1}{8}$ ". This condition has remained. From the last two cases it is evidently better to cauterize

carefully and, if relapses occur, repeat the operation on the same place. The scar left by this operation is well circumscribed and just below the pupil.—*Arch. Ophthalmol.*, vol. xxi., No. 4, 1892.

**Foster (Jno. M.) on Embolism of Arteria Centralis Retinæ.**—A gentleman twenty-nine years of age, having mitral stenosis and regurgitation from rheumatism and endocarditis, noticed two hours before examination, while making his toilet, that he had lost the sight of the left eye. There was no pain or other sensation with the occurrence. The sight was reduced to bare perception of light. The ophthalmoscope showed a dense grayish white effusion covering the disk and macula and intervening region. The arteries as they came in view at the boundary of the effusion were extremely attenuated, nearly invisible. There was no indication of pulsation and interruption of the blood current. On the third day the effusion was still more dense, and whitish striations radiated from the region of the macula. Now there was absolutely no sight. Treatment consisted of iodide of potash internally and an artificial leech to the corresponding temple every fourth day. In ten days clearing of the media began to be apparent at the upper and outer edge of the disk. By the thirty-third day vision of the faintest was detected. By the forty-ninth day the effusion had disappeared, leaving a reddish mottling about the macula, with silvery lines radiating from it, and vision improved to power of distinguishing fingers closed or held apart when held near the eye. An interesting question is the relation that the treatment had to the final clearing up.—*Arch. Ophthalmol.*, Oct., 1892.

## REPORT ON SURGERY.

BY GERTRUDE B. KELLY, M.D.

**Long (J. W.) on Albuminuria: Its Relations to Surgical Operations.**—In a paper recently published on this subject Dr. Long reaches the following conclusions:

1. That healthy kidneys are almost never injured by ether or chloroform.

2. That when, the kidneys being healthy, renal disturbances from the use of an anæsthetic do occur, they are due rather to prolonged narcosis, exposure of the

patient, or perhaps to the combined influences of the operation and the anæsthetic.

3. That a mild degree of albuminuria or nephritis, especially if recent, is not a contra-indication to the use of chloroform or ether.

4. That even in the presence of advanced and extensive renal changes an anæsthetic may be employed, provided the additional risk is explained to the patient or family.

5. That of the two anæsthetics usually

employed, it is still a mooted question, except in obstetrical operations, as to which is the safer, so far as the kidneys are concerned.

6. That while it is by no means the rule, profound functional disturbances, and even organic lesions may be induced by an operation, apart from the influence of the anæsthetic.

7. That such renal changes are due to reflex action, or sepsis, or both.

8. That operations in certain regions, notably the abdomen, the genito-urinary tract, the rectum, and the mouth, are especially liable to produce kidney complications.

9. That a healthy condition of the kidney minimizes, but does not entirely do away with, the dangers referred to.

10. That albuminuria is indicative of renal lesions, and should be regarded with distrust, but is not a positive contra-indication to an operation.

11. That paradoxical as it may seem, an operation will sometimes relieve an albuminuria due to acute affections.

12. That no surgeon is justified in undertaking an operation without first knowing the state of his patient's kidneys.—*New York Med. Exam.*, Sept., 1892.

**Williamson (Henry) on Fracture of the Upper End of the Ulna, with Dislocation of the Head of the Radius.**—G. R. P.— was brought to the hospital with an injury to the forearm, caused by direct violence. In examination I found a fracture of the upper end of the ulna, nearly three and one half inches from the top of the olecranon. Not being able to rectify the displacement of the upper ulna fragment, I made a more careful examination of the limb and found that the head of the radius was dislocated forward. On reducing the dislocation it was found that we had partly rectified the displacement of the upper ulna fragment. It was now an easy matter to get the ulna into correct position, and a good result was thereby ultimately obtained. The case is of great interest when taken into consideration with Professor Macleod's recent paper on this injury, and certainly demonstrates very clearly the great importance of two of his practical precepts, viz.: (1) Whenever we find a fracture of the upper end of the ulna, careful examination for a dislocation of the head of the radius should be made; (2) should such a dislocation be found, it

must be reduced at once, and endeavors made to rectify the displacement of the upper ulna fragment at the same time. From my experience in this case I conclude that the reduction of the dislocation is by far the most important item in the treatment.—*London Lancet*, Oct. 22, 1892.

**Lenn (Nicholas) on an Experimental Inquiry Concerning Elastic Constriction as a Hemostatic Measure.**

—In a paper read before the National Association of Railway Surgeons in May last, the following conclusions are reached:

1. The use of the elastic bandage to secure a bloodless condition of a limb should be discarded, as compression of the parts affected may produce mechanically dissemination of malignant tissues, and microbic diseases.

2. Prior to constriction a bloodless condition should be secured by elevation of the limb.

3. Constriction should be made with sufficient force to interrupt at once both the arterial and the venous circulation.

4. Prevent venous stasis by constricting quickly, beginning pressure in the side of the limb supplied with the principal blood-vessels.

5. Linear and too firm constriction should be avoided, as they are liable to give rise to muscular injury and temporary or permanent paralysis, due to harmful compression of a large nerve-trunk.

6. Elastic compression of a limb for hemostatic purposes should be diffused over a space not less than two inches in width, and can be made with least danger of injuring important structures by an elastic band made for this purpose, or by an ordinary elastic bandage.

7. Circular constriction of a limb should be made, if possible, at a point where the large nerve-trunks are well protected by overlying muscles, and if this cannot be done on account of the site of the operation, a thick compress of gauze should be interposed between the constriction and the limb.

8. The vitality of the tissues when excluded from circulation is endangered by prolonging the ischæmic condition for three or four hours, and gangrene may take place if constriction is continued for a long time.

9. The process of karyokinesis in tissues temporarily deprived of circulation by elastic constriction is unfavorably affected,

if constriction is continued for more than two hours.—*Fort Wayne Journ. of the Med. Sci.*, Sept., 1892.

**Allen (Dudley P.) on Meckel's Diverticulum as a Cause of Intestinal Obstruction.**—Meckel's diverticulum is the remains of the omphalo-mesenteric or vitelline duct, which extends from the lower portion of the ileum to the umbilical vesicle. Usually with the development of the foetus this structure atrophies and entirely disappears. In the cases of its persistence, which I have examined, the location has been from fifteen inches to three feet above the ileo-cæcal valve. It may resemble a small intestine ending like the finger of a glove, hanging free in the abdominal cavity, and having nearly the diameter of the gut itself. It may be patent for only a short distance, or through its entire length, conveying the fæcal matter to the umbilicus, and there forming a fæcal fistula, or the lumen may be wholly obliterated and the diverticulum reduced to a fibrous band. At times it is attached directly to the umbilicus, or to the anterior abdominal wall. It is supposed that it may float freely in the abdominal cavity, and become adherent to any part by chance. The most common point of adhesion, as I have observed it, has been to the mesentery, in the vicinity of the origin of the diverticulum, but there are cases recorded in which it was adherent to the posterior part of the pelvis, to the internal inguinal ring, and to the fundus of the bladder.

The symptoms of obstruction due to the diverticulum are very similar to those of volvulus occurring in the lower portion of the ileum. They are pain,—the location of which is sufficiently definite to be distinctive—with vomiting and constipation. At the beginning of the obstruction, in a patient with moderately thin abdominal walls, there may be found a local prominence in the region of the cæcum. As tympanitis becomes general, the distension of the abdomen will render this prominence imperceptible, but it is an important observation, and the recorded experience of many others, that occlusion of the bowel in the region of the cæcum causes distension of the central portion of the abdomen, more particularly in the early stage, in the epigastric region. In this way occlusion of the small intestine may be distinguished from occlusion of the colon, since the latter

produces correspondingly greater fulness in the flanks.

In operating for intestinal obstruction, if the surgeon keeps in mind the possible presence of a Meckel's diverticulum, he saves much valuable time.

The median incision is probably the best. When the diverticulum is found it should be divided between two ligatures, since it must be remembered that it is often patent, and might discharge fæcal matter into the abdominal cavity. Though the intestine which is constricted may be very seriously decreased in calibre, it must be remembered that this does not necessarily, prevent a return to its normal capacity, and great care must be taken to distinguish between the intestine which is temporarily impaired in calibre through constriction, and one which is permanently narrowed by organic change. On account of the serious condition of the patient, it is probably best to content one's self with a division of the constricting band, and not to attempt its resection.—*Cincinnati Lancet-Clinic*, Aug. 27, 1892.

**Barling (Gilbert) on Appendicitis, An Analysis of Sixty-eight Cases, and a Summary of the Conditions Requiring Operation.**—Appendicitis is the result of a catarrh of the cæcum extending to the appendix, the secretion being retained; or the cicatrization of a typhoid or other ulcer may cause retention; or inflammation may be caused by an impacted foreign body or fæcal concretion. Sometimes a gangrenous patch may be found in the appendix without any obvious reason. An analysis of the cases admitted into the General Hospital, Birmingham, during the last seven years shows that they have been 68 in number. Of these, 7 died; a mortality of 10.3 per cent. In 40 of the cases there was a well-marked turn in the right iliac fossa, but of these only 4 had well-marked abscess, and in only one of the 4 was the presence of suppurations marked by oedema and redness. Fluctuation was made out in two of the suppurating cases. Relapse was exceptional, happening only 5 times, and of these, only one patient came to operation, and in this case concretions were found in the appendix. In the 7 patients who died, only once was the cæcum the seat of the disease; in all the others the appendix was the starting-point. One of these has already been referred to as a relapsing case, and of the remaining 5,

3 were admitted with advanced peritonitis. The analysis of these cases appears to show that operation is required only in exceptional cases, and ought not to be made the rule.

Cases requiring operation may be classified into three groups :

1. Those in which pus can be diagnosed with something like certainty.

2. Those in which, from the acuteness of the symptoms, perforation or gangrene of the appendix may be regarded as imminent, if it has not already happened.

3. Those in which prolonged rest, blistering, etc., fail to prevent relapse.

In Class 1 the indications for operation may be : The presence of a distinct tumor increasing in size despite treatment ; increasing tenderness, hectic temperature, and perhaps redness, œdema, or fluctuation. The operation consists in cutting down on the most prominent part of the tumor, evacuating the pus, and removing the appendix, if it presents itself easily, and is found to be diseased. The abscess sac will generally be found adherent to the abdominal wall, so that the general cavity of the peritoneum is not opened. The cavity must be drained.

In Class 2 the attack generally has a very acute commencement, pain is very marked, and tenderness of McBurney's point extreme. Tumor there may be none to be felt, unless the patient is examined under an anæsthetic. The temperature will generally be elevated to  $102^{\circ}$  or  $103^{\circ}$ , and the pulse will be unduly quick in proportion to the temperature ; at the same time the patient looks very ill. These acute symptoms continuing, and especially if there is even a beginning of distension, operation should be resorted to,—and this is especially true of children. An incision should be made in the right semilunar line, pus evacuated if it is found, the appendix removed if this can be done without any great disturbance of parts. The greatest care should be taken to prevent fouling the general cavity of the peritoneum. The wound should be closed, except for the space occupied by a glass drainage tube.

In Class 3 if prolonged rest in bed with blisters and salines fails to give relief, especially if there be a succession of relapses, operation is called for on much the lines laid down in Class 2, but operation should not be resorted to until rest has had a thorough chance of effecting a cure.—*The Med. Press*, Sept. 28, 1892.

**Andrews (Edward Wyllix) on Pneumotomy for Abscess of Right Lung, and Removal of Large Calcareous Deposit through the Chest Wall.**—I was called in October, 1892, to see a gentleman, supposed to be in advanced consumption. The presence of an abscess was detected, and surgical interference was advised. During the next six months, the patient grew progressively weaker, and eventually discharged large quantities of pus through the mouth. In March, 1892, the patient, who was now nearly moribund, was again seen. The cough was severe, and the sputum fetid, the finger tips bulbous, the feet and legs œdematous, and the emaciation great, pulse feeble and temperature  $102^{\circ}$ - $104^{\circ}$ . Profuse diaphoresis and general exhaustion had supervened. The expectoration amounted to about one pint daily, which the patient had the power of bringing up mostly at one time by turning in a certain posture upon the opposite side, when it would run from his mouth in a stream. Urine was normal. No spiral, tissue, or bacilli were found in the sputum after the most careful examination. It was decided to relieve the immediate distress by the least severe operation, and accordingly simple drainage was attempted. The trocar found no pus in any part of the pleural cavity, which indeed seemed to be obliterated. The patient was then anæsthetized, and very deep puncture resorted to over the cavity at its most resonant point. At a depth of three or four inches calcareous obstruction was felt, and a large cavity entered. This was cut down upon between the sixth and seventh rib in the anterior axillary line. Pleuritic adhesion was complete. The lung tissue bled very freely before the tube was inserted, but the hemorrhage soon ceased. Comparatively little pus appeared until the next day. From this time purulent expectoration ceased, and a large amount of pus escaped daily from the wound. Rapid general improvement now took place, which, however, progressed only to a certain point. The patient was now able to be about, and the appetite was good. Pyrexia and cough largely disappeared. After four months the chest had markedly collapsed. The intercostal spaces were so contracted that drainage could not be satisfactorily kept up through the tube, which was constantly compressed. In July, 1892, sub-periosteal resection of the fourth, fifth, sixth, and

seventh ribs was made in the middle axillary line. The knife was used in incising the lung, the hemorrhage being venous and temporary. No trace of pleural cavity was found. The pleura was three-eighths of an inch thick. The incision was into the middle lobe, was neutral, and entered a large cavity, leading upward and backward but not downward. The walls of the lung cavity, exclusive of the chest-wall, were one and a half or two inches thick where incised. The cavity was conoidal in shape, with the apex upward, inward, and backward, leading to an open bronchus near the posterior side. It had a capacity of about two pints. Without much distension of the wound the hand was passed into the abscess and encountered a large accumulation of calcareous debris. This was in plates or scales, and had probably once been in the form of a shell lining the cavity. Some large fragments were still firmly adherent to the walls, and were detached with difficulty. All the pieces were eroded in the peculiar fashion which dead bone presents when it has lain long in the tissues. Some of the pieces were old, long, and slender, and could easily be mistaken for necrosed ribs. So firmly were one or two fragments embedded in the lung tissue that they were broken in removing them, and it

was feared that some laceration extending into a pulmonary vessel might take place in dragging them from near the root of the lung. The wound was dressed open, the cavity being packed with gauze, which was removed after forty-eight hours. A part of the calcareous debris was as fine as sand, and was washed away. The larger fragments were gathered up and were found to weigh thirty-five grammes. The largest fragments were five or six cm. in length and four cm. in width, and one-fourth cm. in thickness. The fragments saved covered a space nearly the size of a man's hand.

How long this trouble had existed it is not easy to determine. The history given was that of recurrent pneumonia for over fifteen years. The left lung was remarkably free from disease, showing, however, the physical signs of moderate emphysema, secondary, no doubt, to the impairment of function on the right side.

It is too early to make prediction as to this case. An excellent chance of recovery seems now assured. The temperature and pulse have remained low since the operation. No chills or night sweats occur. Appetite is good. The cavity discharges freely, but less than before, and is growing rapidly smaller.—*Chicago Med. Rec.*, Sept., 1892.

## REPORT ON THERAPEUTICS.

**Rose (A.) on the Permanent Warm Bath Employed in Articular Inflammation.**—The writer relates a case of a young and muscular Irish girl who had a severe joint inflammation with violent pains. Anti-rheumatics and anodynes gave but little relief. The plaster-of-Paris bandage was of some service and was kept on from ten to fourteen days. Subsequent to the renewal of the bandage it was found that there was a stiffness of the joint due to synovitis fibrinosa. A warm hot bath for the arm gave much relief. The technique is described in the original article, which also contains a *résumé* of the literature of this therapeutic procedure.—*N. Y. Med. Rec.*, Oct. 29, 1892.

**Hypodermoclysis.**—This is a method of supplying fluid to the body to replace that lost through excessive purging, as in cholera or in cases of hemorrhage. It is also used to wash out from the body various impurities circulating in the blood

or other liquids, and to flush out the kidneys. The process consists in the introduction into the subcutaneous tissues of certain qualities of normal saline solution. As is well known, a quantity of liquid equal to four times that of the normal amount may be passed directly into the veins without producing a rise of blood-pressure, and experiment has shown that within fifteen minutes after the saline fluid flows into the subcutaneous tissues an increased flow from the kidneys takes place. It is not safe to infuse a greater quantity of liquid than one drachm to each pound of body weight (about one pint to an adult) in each fifteen minutes, as if this amount is exceeded, the accumulation of the liquid in the system is so great that the tissues become bathed and finally drowned, because the kidneys cannot excrete the liquid fast enough.

To carry out the operation the sterilized liquid to be infused—namely 7 parts of

sodium chloride to 1,000 parts of water ( $3\frac{1}{2}$  grains to the ounce)—is placed in a glass jar which is absolutely aseptic, and to which the air only gains access by means of a glass tube filled with sterilized cotton. From the lower part of the vessel leads a tube, to which is attached a trocar, also rendered absolutely sterile. The skin over the place where the liquid is to enter is to be rendered absolutely sterile, and the trocar is then inserted into the subcutaneous tissues of the thighs, or preferably of the abdomen, and liquid allowed to flow at the rate named, the pressure being obtained by raising the container two or three feet above the belly-wall. As the liquid enters, a swelling appears in the subcutaneous tissues, which soon disappears after the infusion ceases, and can be much aided in the absorption by the use of massage.

This procedure has been recommended in cholera, but is inferior in value to intravenous saline injections. Good results have followed its use in uræmia. It may be applicable to septicæmia, diabetic coma, and similar states.—*Ed. N. Y. Med. Rec.*, Nov. 12, 1892.

**Cotterell (E.) on the Treatment of Syphilis by Dog's Serum.**—The writer has repeated the experiments of Tommasoli in the treatment of secondary syphilis by means of hypodermic injections of serum prepared from the blood of lambs and oxen.

He gives his own experience as follows: In August of this year I prepared some dog's serum and had the opportunity of trying it upon two patients of the Lock Hospital who were suffering from recent syphilis. The results obtained were good as far as the cases were followed up, the rash and other manifestations quickly disappearing under the influence of the injections. Unfortunately I have lost sight of the patients, due probably to the injections producing a somewhat painful swelling, and partly also due to the fact that they are better, and have in consequence not returned to report themselves.

The *rationale* of the treatment appears to be the marked bactericidal action of freshly prepared serum, and it is essential that the serum should be used when perfectly fresh, otherwise the results obtained will be disappointing.

I have noticed, as other observers have also done, that the first injection or two will send the temperature up slightly, but it quickly becomes normal, and is appar-

ently of no moment. There is also occasionally formed at the seat of the injection a localized swelling, which is tender to touch, and the skin over it is slightly injected, but suppuration never takes place, and the tumefaction soon subsides. Now and then the injection may be followed by an urticarial rash, which, as far as I have seen, does not spread very far from the seat of the injection, and soon disappears.

The serum was injected into the back in doses of two cubic centimetres twice a week, with a Koch's hypodermic syringe, which was well sterilized, and it is a safe precaution to thoroughly wash the skin over the proposed site of injection with 1 in 20 carbolic lotion.

The method of preparing the serum is as follows:—

The blood is taken aseptically from the carotid artery, and allowed to flow into a large sterilized test-tube, at the bottom of which is a little oxalate solution to prevent coagulation. When about three parts filled the tube is plugged with cotton-wool, and the tubes put in a centrifugal machine, by which means the corpuscles and plasma are separated. The plasma is then decanted off, and allowed to clot, from which the serum separates, and can be drawn off into small sterilized test-tubes, which are plugged with cotton-wool; or if required to be transported, it may be drawn into sterilized glass pipettes, the ends of which can be sealed in a gas flame.

Afterwards a necropsy is performed on the dog, and serum only retained if the animal is perfectly healthy.

I have had a small electric motor made, attached to a turn-table, which forms a very convenient apparatus for centrifugalizing small quantities of blood, as it can be attached to an ordinary wall plug where the electric light is laid on, and as it is essential to use the serum freshly prepared, one only makes it as it is required.—*Eng. Med. Press*, Nov. 9, 1892.

**Brackenridge (D. J.) on Transfusion of Human Blood in the Treatment of Pernicious Anæmia.**—The writer discusses the pathology of the disease and gives the records of several clinical cases treated by the method indicated. His conclusions are as follows:—

1st. The real condition of the blood in pernicious anæmia is a delicacy and tendency to early death of the red blood corpuscles.

2d. The probable starting-point of this delicacy and feeble resistance in the blood corpuscles is some functional weakness in the blood-forming organs, which may be due to various possible causes.

3rd. The irregular-shaped, variously-sized, and otherwise abnormal blood corpuscles point to some such imperfect genesis.

4th. Consequently, without any abnormally increased destructive force in the portal system and organs—it being a normal function of the liver cells to destroy the red corpuscles—a greatly increased death-rate of these delicate and short-lived corpuscles takes place.

5th. The introduction by transfusion of a considerable amount of healthy blood acts beneficially in a two-fold way:—

(a.) By immediately improving the health and resistance of the blood (including the delicate blood corpuscles) which becomes mixed with it; and

(b.) Later on, by gradually operating beneficially on the blood-forming organs through which it circulates, restoring their blood-forming functions to the normal condition.—*Edinburgh Med. Four*, Nov., 1892.

**Fenwick (H.) on Thyroid Juice in Myxœdema.**—At a recent meeting of the London Pathological Society Mr. Hurry Fenwick showed two female patients who had been suffering from myxœdema and who had been treated by injections of fresh thyroid juice. Both had improved and in both the injections had been followed by a gradual increase in the daily average of urine passed. Usually there was a large increase in the urine the day following the injection; the amount then fell, but rose again. The character of this extra urine was essentially nervous in type. There was often a remarkable increase on excitement, such as the visiting of friends, and also during the period of menstruation, and these variations introduced fallacies into the investigation as to how far the injection acted as a diuretic. Control injections of water were without result; also in healthy people the thyroid juice usually proved negative. Mr. Fenwick, after reviewing the details of the cases, was inclined to believe that thyroid juice had feeble diuretic action; that the *rationale* of its renal action in myxœdema was the change it produced in the blood which permitted of an easier transudation

of secretion by the kidneys. He founded the latter supposition on the very marked effect which the injections made in the growth of the hair, the secretion of sweat and the catamenial period. The tables of daily urine seemed to favor Mr. Fenwick's belief that congestion of the kidney arose in congestion of the pelvic viscera such as obtains in menstruation, coition, etc.—*London Lancet*, Oct. 22, 1892.

**Mackenzie (H. W.) on the Treatment of Myxœdema.**—Relative to the new plan of treating this malady with sheep's thyroids, Mackenzie has the following to say with reference to the selection and preparation of the latter. (A case is reported in full in *Brit. Med. Four.*, Oct. 29, 1892.) In the sheep the lobes are rather smaller than in man and the isthmus is rudimentary. The lobes can be easily distinguished from the muscle by their oval shape and darker color, although this varies in different cases. I have throughout given the glands raw, except at the very outset, when they were cooked by mistake. I cannot say whether they would have any effect if given thoroughly cooked. That could only be found out by experiment; but I can see no objection to very slightly cooking them—for instance, by frying. It is highly probable that thorough cooking would entirely destroy their effect. The mode of preparation in my case has been simply to mince the gland finely and give it either plain or with a little brandy. The addition of the latter was found to make it more acceptable to my patient, and also diminished the tendency to nausea which she experienced when she knew she was having something raw. Currant jelly might make it more palatable. As mentioned, I gave my patient two whole thyroids (four lobes) every day at first, but found this was too much, as the pulse rate after a time was much increased. I do not think it will be necessary to give the patient more than one thyroid every other day.

Some may prefer to employ a home-made extract of the gland, which may be prepared by mincing up the thyroid, placing it in a mortar with a little crystallized sugar and glycerine, rubbing it up with a pestle, then adding a little water and, after allowing it to stand an hour or two, filtering through muslin or calico. It is, of course, possible that a stable thyroid extract may be obtained which will in prac-

tice be found more convenient than the process I adopted. The important point is to have shown that the thyroid gland contains something which, given by the mouth, has as distinctly curative an effect as hypodermic injections of thyroid juice. —*London Lancet*, Oct. 29, 1892.

**Fox (E. L.) on a Case of Myxœdema Treated by Taking Extract of Thyroid by the Mouth.**—E. M—, aged forty-nine, came under my care. She at that time exhibited all the typical symptoms of a well-marked case of myxœdema.

The disadvantages of having to treat cases of myxœdema by continued hypodermic injections are many and obvious. I was therefore induced to try the effect of thyroid extract when taken by the mouth. I directed the patient how to prepare a glycerine extract of half a sheep's thyroid. Of the extract thus prepared she was to take half one hour before breakfast and the remainder one hour before supper, and to continue doing so twice a week.

She commenced the treatment on June 2d. On July 11th she showed very visible signs of improvement; her facial expression was decidedly brighter, her speech was better, and she felt generally much stronger.

On September 12th the improvement had continued. The skin was soft and perspired freely; the œdema was much less. She was ordered to take half a thyroid, lightly fried and minced, to be taken with currant jelly once a week, and to continue taking the extract once a week. By mistake she took the minced gland twice a week for a fortnight; she then noticed she was getting rapidly weaker, profuse perspirations breaking out on the least exertion; she was unable to walk or stand steadily. She left off taking the gland on September 22d and began rapidly to recover her strength.

On October 17th she considered herself well, and better than she was two years ago when the symptoms of myxœdema first began. Her condition now is in every way satisfactory. Her face has assumed its ordinary proportions, her speech is normal, the œdema has gone, and menstruation has returned.

I have reported this case, as the method of administering the remedy is simple in the extreme, and in my case, at all events, the result has been satisfactory. If I had another case to treat, I should begin with

small doses of the minced gland, as that seems to be more potent, gives less trouble in preparation, and is preferred by the patient.—*Brit. Med. Jour.*, Oct. 27, 1892.

**Peabody (G. L.) on Feeding in Fevers.**—We are accustomed, I think, to have too great a dread of doing harm at the site of lesion in the ileum in typhoid fever by giving solid food. If I am correct in my opinion as to the inference to be drawn from hunger in a fever patient, there is even less likelihood of causing damage to an ulcerated ileum by giving finely divided egg, or beef, or chop, to such a patient than by giving him milk; and my experience seems to justify the inference. It has been my practice for years to allow albuminous foods of these descriptions to such patients, even before the fever leaves them, under these conditions. I have at present under treatment several patients with typhoid fever whose temperatures reach 101°, 102°, and 103° F., daily, who are hungry, and who are receiving such solid food once a day. So far as I am aware, I do not have a larger percentage of relapses, or hemorrhages, or other serious complications, or accidents in my practice than I did before I adopted this plan, or than my colleagues do who have not yet adopted it.

Even tea, and coffee, and beer are not allowed by many doctors; in my hands they have been very useful when given to those who have been accustomed to them in health and desire them in fevers. Well-cooked oatmeal is another very nutritious food that I allow under the same conditions as meat.

When the appetite fails, in consequence of the presence of fever, meat becomes more repugnant than any other food as a rule. Then it would be most injudicious to force it upon a patient; but the returning appetite, the awakening desire for meat, I believe to be nearly always an indication that the stomach is prepared to take care of it. That much is gained by maintaining the nutrition of fever patients needs not to be mentioned to the members of this Society. Of course, the necessity of giving an abundance of water is not to be lost sight of.

What I have said of feeding typhoid-fever patients is equally true in other forms of fever. It is, in my judgment, a mistake to withhold solid food merely because a patient has fever, and it is incorrect to re-



gard milk as a fluid food, as our knowledge of the physiology of digestion teaches us. Our knowledge of the form in which milk often appears in the fæces emphasizes this latter fact. Milk will always remain the most serviceable general food in disease, and especially in fever, largely because it is swallowed with much less effort than attends the taking of other foods; because it is the cheapest of the foods; because it requires little or no preparation, and because it is so commonly well borne. But where it fails to nourish the patient, where it is not well borne, where it cannot be taken, for any reason, it is well to remember that efficient adjuncts and substitutes are within reach.—*N. Y. Med. Rec.*, Nov. 26, 1892.

**Bond (R. I.) on Chewing-Gum in Fevers.**—The salivary glands play quite an important part in continued fevers, yet they are not considered in the treatment of the case. One of the first and most important restrictions in the patient's dietary is to drop all solid food from the list at the physician's first request, and just then the salivary glands begin to lapse into a torpid condition which very often results in an inflammation and, finally, suppuration, and that disagreeable dryness to the tongue and fauces so uncomfortable to the patient. For the relief of this trouble I have found nothing of so much importance as some nice form of aromatic chewing-gum, which relieves the thirst and dry mouth, improves the appetite and digestion, and restrains nausea, if any. Hence some of the most disagreeable accompaniments of the disease are mitigated. I believe also that it materially aids the absorption of the medicine when the alimentary tract is so impaired by the incessant fever.

I do not claim originality in this treatment, although I have never found any reference to anything of the kind. However, it may have been regarded as too simple to need mention; still it is, in my estimation, quite important in any continued fever.—*N. Y. Med. Rec.*, Nov. 12, 1892.

**Fenwick (J. S.) on Cold Applications in the Treatment of Continued Fever.**—The writer discusses the general application of cold in continued fevers with special reference to enteric fever and pneumonia. The paper is an argument for the use of the ice-cradle. This consists essentially of an iron surgical cradle, from

the central bar of which are suspended several small zinc pails half filled with ice. The patient lies upon the bed, covered only with a thin sheet of opaque muslin, and the cradle, enveloped in a light counterpane, is placed over him. If any feeling of chilliness is complained of, a hot-water bottle may be kept in contact with the feet. The ice in the pails is renewed at intervals, and it is found convenient in practice to cover the bottom of the pails with a piece of lint, in order to prevent any condensed moisture from dripping upon the body of the patient. In default of an iron cradle, a capital substitute can be made with five broom-sticks, four being fixed to the bed in an upright position, and the fifth fastened diagonally to serve as a support for the ice-pails. Strong wire, or two wooden hoops sawn through their centres, are also found to be convenient materials out of which to improvise a cradle. Under such an arrangement a patient may lie for many days, the utmost required being to replenish the ice-pails, and occasionally to renew the hot-water bottle at the feet.

Although the mean temperature of the cradle can rarely be reduced more than a degree or two below that of the surrounding atmosphere, it usually suffices to effect a reduction of several degrees in the bodily temperature, and, what is of more importance, to maintain it at a reduced point.

**Conclusions.**—The mere reduction of the fever in cases of enteric fever or acute pneumonia does not constitute the entire treatment of the disease—it is, in fact, only the treatment of a single symptom.

But in the absence of the specific remedies our efforts have to be directed to the perfection of such measures as may help to maintain life until nature can step in and effect the cure; and one of the most prominent indications in this connection is to save excessive wear and tear of the vital tissues by diminishing the injurious influences of pyrexia.

For this purpose the cold bath is undoubtedly the quickest and most reliable means at our command, and in urgent cases (hyperpyrexia) it is the only measure which proves of any service. But it has been already pointed out that so many inconveniences attend the administration of the bath that in numerous cases this method of treatment cannot be employed. I have therefore endeavored to describe the beneficial results which have accrued

from the use of the ice-cradle combined with hot sponging, the main features of which may be summed up as follows :

1. In cases of moderate pyrexia ( $105^{\circ}$ ) the temperature of the body can usually be reduced about  $1\frac{1}{2}$ — $3^{\circ}$  F., and maintained at a reduced point : where the temperature exceeds  $105^{\circ}$  F., recourse must be had either to the cold bath or to the ice-pack.

2. The measures themselves are exceedingly simple in their execution and entirely free from danger.

3. In order to obtain the utmost antipyretic effect, strict attention must be paid to the various details connected with the use of the ice-cradle, especially with regard to the maintenance of a proper current of air through the apparatus.—*Practitioner*, Nov., 1892.

**Wilson (J. C.) on the Brand Method of Treating Typhoid Fever in the German Hospital of Philadelphia.**—The statistics of the German Hospital now rest on a sufficient number of cases and extend over time enough to warrant conclusions as to the efficiency of the treatment in an American hospital. It has reduced the death-rate in this institution nearly 50 per cent. from the best showing of previous years, and 66 per cent. from the most favorable statistics of the hospitals of the city under other methods.

It is our custom at the German Hospital to administer to the patient upon admission, if before the 10th day, a laxative dose of calomel, from gr. vijss-x, and in cases entering the hospital during the first week this dose is very often repeated ; otherwise the management of the cases in almost all instances conforms strictly to the method of Brand. The necessity to depart from the routine plan in any particular has scarcely ever arisen in my service.

When patients are admitted after the disease has made some progress, at the end of the first or during the second week, pending the influence of the baths in controlling some of the more important symptoms, an influence which does not show itself until a number of baths have been administered, it has been thought necessary occasionally to administer strychnine as a cardiac stimulant ; and to control a troublesome diarrhoea not moderating after the action of the calomel, by an occasional opium-suppository. The maxim of universal application, that the patient, and not the disease, is to be treated, is constantly observed.

The method of Brand consists in the following systematic procedure :

Whenever the temperature taken in the rectum reaches  $102.2^{\circ}$  F. ( $39^{\circ}$  C.) the patient is placed in a bath of  $65^{\circ}$  F. A compress, wet with water about five degrees lower, is placed upon the head, or water at a lower temperature is poured upon the head and shoulders. The patient remains in the bath fifteen minutes, during which time he is systematically rubbed by the attendants and encouraged to rub himself. At the expiration of that time he is removed from the bath, and wrapped in a coarse linen sheet, over which a blanket is folded, the extremities being thoroughly dried and rubbed. A little wine or spirits is then given. This is repeated every three hours, unless the temperature remains below  $102.2^{\circ}$  F. The alimentation is liquid, nutritious, and carefully regulated. No drugs are administered.—*Phil. Med. News*, Nov. 26, 1892.

**Sihler (Chr.) on the Hydriatric Treatment of Typhoid Fever in Private Practice.**—The writer concludes a lengthy article as follows :

1. Americans, women, children, and men, alike, experience the same beneficial effects from the cool baths that European patients do.

2. In cases in which the baths fail to reduce the temperature of the patient, they should not be discontinued ; they will still have a beneficial effect.

3. The prolonged lukewarm bath (from  $90^{\circ}$  to  $96^{\circ}$  F.), with gentle effusions of cool water (from three to four pails, of from  $60^{\circ}$  to  $70^{\circ}$  F.) to the head is often an excellent remedy in case of great excitement and inability to sleep (*delirium versatile*).

4. Women take to the baths more kindly than men.

5. When the fever is very high and the elevation of temperature is marked soon after a bath, it is advisable to repeat the baths sooner than the formula requires (three hours), and to give them every two hours.

6. Even when patients have reached the third week, and with hemorrhages, baths, and water more or less cool should be used according to the directions of Brand in the treatment of the "degenerated" cases. Parched, smooth, fissured tongues are unknown to the hydriatric treatment.

7. The method can be used in country practice.

A few words of advice to those thinking of using the hydriatric method in private practice may not be out of place here.

1. First of all get a bath-tub made. I had one six months before I had a case. My tubs are made of galvanized iron, with a strong iron rod around the rim, four-cornered, 5½ feet long, 2 feet wide, and 16 inches deep. If you will have a tub you will use it, and if you have your tub, thermometers, etc., on hand, your patients will be under the impression that you know all about the method. My bath-tubs are amongst the most useful of my instruments.

2. Be present during and after as many baths as possible, and especially at first; this both for the patient's sake, who will be encouraged, and for your own sake, who will be instructed.

3. As soon as possible instruct one or more suitable persons in the use of the method. Well-to-do persons will be glad to employ them, and even those less favorably situated can have a nurse, because not much money need be spent for drugs, and because the physician can restrict the number of visits if one of his trustworthy nurses is taking care of the patient. If the family wishes or is compelled to do its own nursing, you may send such a skilled person to the house for from twelve to twenty-four hours to give instructions in the use of the baths, thermometers, etc.

4. Do not propose the method of a half-hearted way. If you are convinced that Brand and his followers are in the right, tell your patients that you consider it your duty to use the method. If your patients are like mine, not more than one in twenty will refuse to take the baths.

5. Let your first case be one that you can treat from the beginning and treat accurately and strictly after Brand, so that both the community and yourself will not lose confidence in the method.

6. Follow the directions of Brand, Bouveret, and Vogl as closely as possible, and do not "improve" on the method before having used it for some time.

**Surgical Interference in Perforated Typhoid Ulcer.**—It would appear that the prognosis, either with or without operation, is almost uniformly fatal in perforations rising before the commencement of defervescence of the disease; while, probably, with operation, an increasingly favorable prognostication may be given as

the complication occurs at later and later stages. Our own judgment is in favor of operation at any period if the lesion can be positively diagnosed; for death is inevitable without surgical interference, and the operation has not yet been performed in a sufficient number of cases for us to be positive that in the first two or three weeks there are no circumstances under which an exceptional case might not be saved.

Diagnosis is therefore the supreme question. If this cannot be positively established in the early periods of the disease, operation should never be considered; for scarcely any horror could equal that of opening the abdomen in the middle or early periods of typhoid fever and finding that one of the many misleading symptoms then often present had caused a needless and probably fatal operation to be performed. At later periods, when operation, *per se*, would be less lethal, more risks might be taken if the diagnosis is not absolute. The one successful result on record was obtained late in convalescence.

Regarding the operation itself, the indications are simple: median incision; search for lesions from the cecum upward along the ileum, then in the appendix (a frequent site of typhoid perforation), and finally downward along the colon; suture of perforations, without trimming the edges, with Lembert sutures, and turning into the bowel-lumen of sites of impending necrosis or perforation by the same means; copious irrigation of the entire abdomen with hot (100°) water; and finally, introducing a drain-tube to the base of the pelvic cavity, and suture of the parietal wound. Extensive perforations, actual or impending, would call for the attempted formation of an artificial anus.—*Ed. Med. News*, Nov. 26th, 1892.

**Gray (H. V.) on Interrupted and Conversion Method of Treating Malaria.**—By these terms the author means the conversion of the remittent and continued types of malarial fever into the intermittent, by interruption. Of malarial outbreaks we have two kinds. The ague or chill type, ending in fever or sweat, is the explosive form. The remittent and continued is the passive or non-explosive. One case of remittent fever treated by the writer lasted five weeks, and then grew decidedly worse. Gray used twenty-five grains of quinine daily. He gives the further history of the case as follows:

Early one morning I was called up, and found him very ill—temperature,  $107\frac{1}{4}^{\circ}$  F.; pulse, 150. There was a whistling, rapid respiration; skin parched and arid: entire suppression of urine. I concluded to interrupt and advance this case. I threw the cover off, the window being open, until the patient was chilly. In the meantime I was getting hot water sufficient to fill a large new tub. I put the young man in this water, covering him up with blankets, only leaving his eyes and nose exposed. He remained in this tub of hot water fully half an hour, but his body and head were supported, and hot water was added from time to time. He broke into a tremendous perspiration. I ordered a drink of whiskey and digitalis, and, as he was about to faint, had him taken up and put to bed, wrapped in the blankets, with an extra dry one. He remained in these blankets until everything was sweat. Meanwhile I had his body rubbed at different points with hot, dry towels. I then commenced quinine again, giving him fifteen-grain doses every two hours for three doses. At 4 P.M. that day his fever left him, and I am glad to say he never had any recurrence.

I did not use the quinine until the suppression of urine was overcome, having free diuresis and the skin in full perspiration. Had I used quinine before these emunctories were freely aroused, I would have killed my patient. I have made it a rule ever since, when cases are obstinate, to use the interrupted and conversion method.

Those living in that section where the second form of poison prevails should try the interrupted and advanced method. To interrupt and advance, you convert the second (passive or non-explosive) type into the first by reducing rapidly the temperature and chilling the body; then, by using the hot bath, you bring on a sweat. You must exercise judgment, of course, and be ready with stimulants and other supporting measures. Then is the time to make quick but useful use of quinine.

N. B.—You can chill and make your patient shiver by a few cold blasts from a hand bellows, or chill by placing your patient between ice sheets for a few moments, and then quickly putting him in a hot bath. Be careful in using coal-tar products, if at all.—*N. Y. Med. Record*, Nov. 5, 1892.

**Dawbarn (R. H. M.) on Arterial Saline Infusion; a Report of Three Additional Cases by the New Technique.**—The writer reviews some of his own previously published writings giving the technique of this procedure, and discusses its physiological bearings. He then reports three more cases—one of shock following an operation for removal of a bullet from aseptic knee-joint in a woman who was alcoholic. The patient was pulled out of her dangerous condition, but disobeyed orders, sat up after being enjoined to lie quietly, and fell back dead.

In the second case the procedure was followed in a case of placenta prævia. The patient was kept alive for six days but finally died of exhaustion.

In the third case, the trouble was bleeding in a young woman after miscarriage. In this instance recovery was prompt and uneventful.

A fourth case of interest is reported as follows:

The patient was a baby of five months, suffering from gastro-intestinal catarrh, and had had so many watery movements, in spite of able treatment, that some hours before I arrived the case was regarded as hopeless.

I found a sunken fontanelle, pinched features, very rapid and feeble pulse; and felt that here, just as in cholera, there was indication enough for the Cantani method of treatment, so far at least as saline infusion subcutaneously was concerned. This was accordingly done: as usual, with very hot salt-water, Davidson syringe, and hypodermic needle. Into both thighs, just beneath the skin, a considerable amount was injected, which we estimated to be equal in proportionate bulk to two quarts in an adult. In addition I advised rubbing in hot cod-liver oil everywhere (except the abdomen) for an hour, three times in twenty-four hours.

It was thought wise to repeat the hot salt-water infusion. The child steadily though slowly recovered from its gastro-enteritis. At this date, nearly two months after that of my visit, she is delicate, but has long been convalescent.—*N. Y. Med. Record*, Nov. 12, 1892.

**Neumarch (B. J.) Notes on a Case of Transplantation of Skin by Ceci's Modification of Wolfe's Method.**—James O'D., *et. al.* thirty-seven, admitted into the Hospital on June 22, 1892. He had fallen from a cart on to the ground and

severely lacerated his scalp, exposing but not fracturing the skull. A large flap had been peeled off—about  $4\frac{1}{2}$  inches by  $3\frac{1}{2}$  inches; it was only attached lightly at the posterior margin. The wound had been carefully stitched and dressed. I saw him shortly after his admission, and from the appearance of the injured part, feared there was little hope of the flap surviving. This proved only too true, and the condition four days after admission consisted in a large sloughing wound, with exposure of the bone for about the space of two inches by  $1\frac{1}{2}$  inches.

I considered it inadvisable to wait, and determined to try and cover the bone, which was entirely denuded of its periosteum, by Ceci's modification of Wolfe's method of transplantation of the skin.

I carried out the details exactly as mentioned in Ceci's paper reported in the *British Medical Journal* for April 16, 1892. The edges were first pared, and the wound kept aseptic. Twenty-four hours afterwards I removed a flap from the patient's right arm, 4 inches by 2 inches, consisting of skin without any subcutaneous tissue or fat. I used a very sharp knife and had no difficulty. The flap was cut to correspond with the denuded surface of the bone, and the corners and bits removed to allow this were utilized for the surrounding granulating surface. The whole operation lasted barely 15 minutes. The flap was pressed on to the part, and a dry absorbent dressing applied. Seven days afterward I examined the seat of operation, and I am sorry to say that in so doing I removed a large islet of skin which had partial adhered; the portion, however, covering the bone had adhered to the margin, and though no appearance of cuticle remained the bone was covered with minute granulating points, and the surface has since quickly granulated and covered the bones as you now see. —*Australas. Med. Gaz.*, Sept., 1892.

**Watson (J. S.) Some Modifications of Thiersch's Method of Skin-Grafting.**—Assuming that Thiersch's rules are familiar to the reader, I only wish to mention the following modifications as adopted by me:

1. The substitution of four per-cent. boracic acid solution for the sterilized salt solution, both during the operation and in the subsequent dressings, if wet dressings are used.

2. Instead of the frequently repeated

moistening of the grafted surface and the dressings, it is sufficient to wet the gauze dressing once in twenty-four or forty-eight hours with the boracic acid solution; the gauze dressing being covered over outside by a rubber or gutta-percha tissue.

3. If the dressing remains odorless it need not be removed until at the end of from four to six days after its first application.

4. Perfectly successful immediate results may be obtained under the use of *dry* sterilized dressings—healing taking place under one dressing. (This plan I have not tried, however, sufficiently often to be able to say, from personal observation, if the good results are as invariable as under the wet dressings, or if the skin of the newly healed surface is as sound ultimately.)

5. It is unnecessary to curette the surface to be grafted, *provided it be covered by healthy, fresh, red, flat granulation tissue.* This omission saves the time which is required to still the bleeding which follows curetting.

6. Where, under a reverse condition of the exposed surface, curetting *has* been done, the application of an Esmarch bandage and tourniquet, when possible, and the leaving of the latter in place for from one-half an hour to an hour, after the operation has been completed (as proposed by Dr. McBurney), is of decided advantage.

7. It is not necessary to the success of the operation that the whole of the exposed surface should be covered with grafts at one time. The patient may be in too exhausted a condition to allow of the prolonged etherization necessary to cover an extensive area; if so, there need be no anxiety as to the result if but a portion only of the surface be grafted at one time.—*Boston Med. and Surg. Jour.*, Oct. 27th, 1892.

**Davis (Wm.) on Kumysgen.**—Kumysgen or Kumyss powder is a powder to add to milk, producing what is known as kumyss. The chief difficulty with kumyss is that its preparation is something of an art, and, as it will not keep, it must be made frequently. Now, in kumysgen this difficulty is entirely overcome. The curd having been dried and concentrated by evaporation of its water, its fine separation is easily accomplished, and in the powdered form in which it is prepared it readily makes a solution whose particles are much finer than in kumyss, while at the same time it is possible greatly to increase the nutritive power of the drink prepared.

The writer narrates the case of a young woman with gastro-enteritis on whom the kumysgen produced a happy effect both in quieting the stomach and bowels and in affording nourishment. It was administered a glassful at a time, repeated every three hours, giving nothing else for the first thirty-six hours, then adding milk to the kumysgen, then giving crackers with each glass, and so adding one thing after another to the bill of fare, getting the patient gradually back to a diet that included quite a variety of articles of plain food. It is also useful in the vomiting of pregnancy, for the dietary of the nursing woman and in typhoid fever.—*N. Y. Med. Jour.*, Oct. 1, 1892.

**Mitchell (C.) on Lactate of Strontium.**—So far as is known the indications for the use of strontium lactate are as follows: Scanty urine loaded with albumen; uræmia impending but as yet no convulsions, coma, etc.; in patients without fever.

The drug is of service in parenchymatous cases rather than in interstitial; is said to diminish albumen in the highly albuminous urine in cases of pregnancy and the puerperal state; has been found useful in the parenchymatous nephritis of rheumatism and gout.

Salts of strontium have in the past been in disfavor on account of impurities, due to presence of toxic barium compounds. It is claimed that salts of strontium are now manufactured which are free from barium. Solutions of potassic chromate should give no immediate precipitate with solutions of salts of strontium, and solutions of potassic dichromate should give no precipitate at all.

Finally, the patient to whom the strontium is given should be put on non-nitrogenous diet, as is usual in cases where albumen is present in abundance.—*Med. Era*, Nov., 1892.

**Grier (W. F.) on the Toxic Effects of Antifebrin Complicated with Alcoholism, Illustrated by a Case.**—Patient was a woman aged forty-five, who had been drinking heavily and presented cyanosis with enlarged superficial capillaries in the face. The general aspect of the face was of a dusky ashen-blue-gray appearance, so also with the hands and feet, the hue of the nails served to heighten the livid appearance. Stigmata appeared on the chest and various parts of the body.

It was elicited that in addition to the

stimulants taken for indulgence, the patient had been almost incessantly drugging herself with various remedies, among which may be mentioned blue pill, Hunyadi Janos water, citrate of magnesia, sweet spirit of nitre, sal volatile, and lastly antifebrin, of which she had taken ten grains at 8 P.M., and the same quantity at 11 P.M., 2 A.M., and 7 P.M., in all forty grains within eleven hours.

The respiration was 19, heart action rapid, but while I could not make out any murmur I was not satisfied that the heart-sounds were pure over the aortic area and down the sternum to the ensiform cartilage. I was much impressed by the character of the pulse at the right wrist, which numbered 104, as it reminded me of pulses I have observed similar in character in aortic aneurisms. This caused me to examine the pulse at left wrist, which I found from four to five beats per second quicker (counted over several minutes) and much fuller, of lower tension and of easier compressibility. At the manubrium sterni a distinct prominence was noticeable, which the patient, seeing me observe, palpate, and percuss, remarked was "a periostitis!" I could not make out any definite signs, such as fremitus, bruit, etc., indicative of aneurism, yet it is only right to record the possibility of a fusiform aneurism, particularly as the age and habits of the patient, together with the suspicious facts noted, favored such an idea.

The tongue on being protruded was seen to be so large that one wondered how the mouth could contain it. It was heavily coated with a yellowish white fur, the breath being exceedingly offensive.

**Treatment.**—Upon general principles, I determined to treat the case as one of acute alcoholism, therefore gave her ten grains of calomel at the outset. After the lapse of one hour I commenced the administration of small doses of nitro-glycerine, one-half drop of a one per cent. solution being given every hour, and the regimen restricted to small quantities of peptonized milk and meat-juice.

In the course of twenty-four hours the cyanosed condition was materially improved, the tongue lessened in bulk and cleaner. The restlessness diminished and the pulse fell to 80. Not wishing to push the effect of the nitro-glycerine any further, I now gave her tincture of digitalis in ten-minim doses as a heart tonic and non-in-

toxicating stimulant. On the third day the cyanosis had disappeared and the patient was in a more normal condition, while on the fifth day she was completely restored to her usual health.

No other drug was administered, except a sedative of twenty grains of chloral and thirty grains of ammonium bromide to secure sleep at night, and a saline purgative on the second day to flush out the intestines after the administration of the large dose of calomel given in the first instance.—*N. Y. Med. Rec.*, Oct. 29, 1892.

**Kirkpatrick (G.) on Rhus Toxicodendron in Psoriasis—Effect of a Large Dose.**— . . . I wish to give you my experience with rhus toxicodendron. I have not known of its use in rheumatism, but some twelve years since I was advised to try it in skin diseases, and after using it in quite a number of cases I have concluded that it is one of the most efficient single remedies we have in this class of cases. I have quite recently treated a very bad case of psoriasis, effecting a cure in less than six weeks. I gave the lady (fifty years of age) from five to ten drops of a saturated tincture three times a day, and used as an external was dilute alcohol, with a small quantity oil of wintergreen in the alcohol. I make a saturated tincture from the green leaves by crushing them and covering them with dilute alcohol.

My faith in its usefulness in skin diseases was strengthened by an accident that happened me. I had a bottle of the tincture and a bottle of syrup of rhubarb sitting together, and by mistake I picked up the bottle of rhus and took a good swallow. On discovering the mistake I immediately took pretty large doses of olive oil and about ten grains of carbonate of soda. I felt no bad effects from this over-dose, but to my surprise on the second day I found complete desquamation was taking place, so that every bit of the cuticle was completely shedding off, and I now believe I am proof against external poisoning by the leaves.—*American Therapist*, Oct., 1892.

**Bradford (F. H.) on Urticaria after the Administration of Piperazine.**— On the 9th of September, 1892, I was consulted by Miss I., seventy years old, for a painful swelling of the right knee, which she attributed to rheumatism, but which on account of family peculiarities and her nervous temperament I diagnosticated as gout.

Having treated her on several occasions for digestive disturbances, I decided not to give her colchicum, but prescribed phenacetin and salol, and topic applications. These not relieving the trouble I gave

**R.**—Piperazin . . . . gr. lxiv.  
Aque destil. . . . f 3 iv.—M.

**S.**—One teaspoonful in half a glass of soda-water, at 9 and 11 A.M.; 3, 5, 7, and 9 P.M., and on retiring; thus in the course of the day fourteen grains of piperazine.

The treatment proved very acceptable to the patient, agreed with the digestion, and was followed by marked improvement.

On the sixth day of the administration of the medicine the patient complained of an annoying burning and itching of the skin, which proved to be dependent upon urticaria.

Previous to this occurrence her skin had always been singularly free from eruptions of all kind, and the inference was that the medicine administered gave rise to the trouble.

Piperazine has been highly recommended as a remedy for pruritus in gouty or rheumatic patients.

Dr. William S. Disbrow, in *Notes on New Remedies*, March, 1892, says "that it affords great relief from those itching symptoms which are generally termed pruritus, whether occurring alone or with rheumatic or gouty pains."

In my case there never had been any evidence of pruritus, although the woman was of a marked gouty diathesis.

Careful attention was given to her diet, and there was no gastric disturbance; in every respect the medicine agreed with her, with the exception of the cutaneous trouble which, while annoying, was not attended with any dangerous symptoms.

I may add that the gout entirely disappeared and to the present time there has been no return.—*Phil. Med. News*, Nov. 19, 1892.

**Tropsin.**—Professor Schweigger after several months' experience with tropsin in eye surgery, reports that,—1. A 3 per cent. solution produces complete corneal anesthesia more rapidly than cocaine. Iridectomy could be done painlessly two minutes after putting three drops into the eye. 2. Anesthesia lasts from three to six minutes for each instillation, and no further prolongation can be produced save by a fresh dose. Mydriasis is absent or but slight. 4. Ischæmia never occurs, but

sometimes there is a passing slight hyperæmia and a little smarting unless normal saline solution be used as a solvent. 5. No injurious symptoms were ever observed. 6. In removal of foreign bodies, tropsin seems, from its quicker action, far preferable to cocaine. Dr. Silex, assistant in the Polyclinic, has obtained similar results, and has painlessly performed tenotomy within half a minute from applying a 3 per cent. solution of tropsin.—*Edinburgh Med. Journ.*, Nov., 1892.

**Evans (Wm.) on Sparteine Sulphate in Angina Pectoris.**—The writer records case of a woman aged thirty-eight, with typical symptoms of angina pectoris. Evans says: The patient stated that she had taken tincture of digitalis for a long time, increasing the dose until she took almost a teaspoonful three times daily, but she had never received any permanent relief from it. The prominent nervous symptoms in the case induced me to prescribe sparteine sulphate, gr.  $\frac{1}{4}$ , t. i. d. I did not see the patient again for more than a month, when I was called to her in another attack. This time neither the pain nor the dyspnœa were so severe, and they yielded more promptly to treatment. She stated that she felt much better in the interval, the minor spells being less frequent.

The dose of sparteine sulphate was increased to four times daily. Five weeks later she had another attack which was comparatively mild, and was quickly relieved by chlorodyne. She reported herself as greatly improved, having had but few minor paroxysms. Recently, after an interval of nearly eight months, I saw this patient again. She had had but little trouble in that time except occasional darts of sharp cardiac pain, and these only annoyed her when she had been negligent in taking her medicine. Her general health was excellent, and she was capable of more exertion than at any time since the beginning of her trouble.—*Univ. Med. Mag.*, Nov., 1892.

**Hammond (G. M.) On Maltine with Peptones in Certain Nervous Affections.**—In certain nervous affections, particularly in epilepsy, and above all in the epilepsy of infancy, it is essential to provide a nourishing diet, and at the same time guard against gastro-intestinal irritation, which will invariably follow from overfeeding or from the ingestion of substances which the disordered digestive fluids can

not cope with. Recently I have used maltine with peptones in these cases. The peptones form an excellent combination with the maltine, since the latter is not only nutritious, but, by containing diastase, materially assists to digestion of the starchy foods. In this manner I have given nitrogenous food in those cases that particularly require it, and in a form which obviates all danger of gastro-intestinal irritation. Practically, the children thrive on it. Children who were doing well on medicinal treatment and an exclusively milk diet have improved more rapidly in strength and bodily condition when the maltine with peptones was regularly administered. Milk, which contains only about three per cent. of proteides, is the only diet I have heretofore allowed epileptic children to have. The gastric juice is capable of converting this amount of proteide matter into peptones, but is not capable of doing much more. Even with a liberal quantity of milk, a child three years of age and over does not get sufficient nitrogenous nutrition. With the addition of maltine with peptones to the milk diet a sufficient quantity of proteide food in a digested condition can be given with the result of materially benefiting the patient's physical condition.—*N. Y. Med. Jour.*, Dec. 3d, 1892.

**The Transfusion of Nervous Matter in the Insane.**—Dr. Constantin Paul has called attention, in a recently published memoir on the subject, to the value of what he calls nervous transfusion in the treatment of neurasthenia. The substance employed is the gray matter of the brain of a recently slaughtered sheep, allowed to macerate for twenty-four hours in twice its weight of pure glycerin, to which is subsequently added an equal quantity of boiled water. This is filtered, as well as prepared with all antiseptic precautions, and should be a clear, limpid, colorless, sterile liquid that will keep for a week with ordinary precautions. A drachm of this liquid is injected every second day into the thigh or the lumbar region, after the skin, syringe, and needle have been carefully disinfected. The injected liquid forms a small tumor that usually disappears within twenty-four hours.

In the *Gazette Médicale de Paris* for August 27th Dr. A. Cullerre reports the results that he has obtained with this substance in fourteen cases of insanity. In eight patients the results were good, in four there was a



slight influence produced, and in two there was no effect. The author concludes that these transfusions are beneficial in asthenic as well as in tuberculous insane patients, and that they arouse the nutritive functions almost instantly. One of the first evidences of this result is an increase of appetite, a most desirable result in mental alienation, to combat sitophobia. The reconstructive effects are rapid, muscular weakness disappears, the flesh increases, and all the organic functions are regulated. The psychopathic state in curable cases has been transitorily improved during a few hours immediately following the injections, but this improvement has not persisted. The author does not consider this conclusion definitive, as the major portion of his patients were incurably insane, and it is the rule in the curable forms of insanity for improvement in the mental condition to keep pace with nutritive improvement. — *Ed. N. Y. Med. Jour.*, Nov. 5th, 1892.

**Richardson (B. W.) on Peroxide of Hydrogen in Diphtheria.**—In 1857, when I began to experiment with it, the peroxide was the rarest of chemical curiosities; it had never been used in medicine, and I had not a spark of light to guide me as to the number of volumes that could safely be employed medicinally. I began with strengths of four and five volumes; then I moved up to twenty and thirty volumes; but I soon learned that with the higher volumes the oxidation was so rapid in the presence of pus and similar disturbing substances, the effect was practically explosive in character. In a case of abscess of the antrum I injected a drachm of a thirty-volume solution through an opening into the cavity made by the extraction of a tooth and free perforation, and witnessed an action which for a few seconds alarmed me, owing to the gush of purulent foam that followed. I found afterwards that for the destruction of pus weaker solutions would answer well enough, and from that time until my first publication on the substance made to the Medical Society of London in 1860, I gave to this question of volumes the most careful study. In the end I came to the conclusion that on the whole the ten-volume strength was the most practical, and I fixed on that as a standard which has been generally adopted by the profession. I have never seen occasion to suggest the alteration of that standard, but there are exceptional cases where

a solution of greater strength may be used, and diphtheria is one of these. By the local application of the solution to the diphtheritic membrane destruction of the membrane and adhesions of it are more rapidly secured, than by the lower volumetric strength, and as the surface is open there is no danger of creating tension or forcible rupture of parts. The same rule applies to applications of the thirty-volume solution to the cutaneous surface in phagedæna, syphilitic sore, and senile gangrene.

On the other side, there are cases in which the ten-volume standard solution may be advantageously used in very small quantities. I have a case in hospital just now which illustrates this point. A woman is suffering from a circumscribed abscess discharging from a fistulous opening in the abdominal wall. Here I introduce the solution in small quantities by saturating a pledget of cotton with the solution, introducing it through the sinus by the probe and repeating the dressing frequently. By this plan I have seen a large cavity contract and close up in the most satisfactory manner. In the treatment of *fistula in ano* this method ought to supplant, in many cases, operation by the knife.—*Eng. Med. Press*, Nov. 9, 1892.

**Verneuil, on a Flexible Cannula for Tracheotomy.**—At a recent meeting of the French Surgical Society of Paris, Verneuil spoke on the cannulæ at present in use for tracheotomy as being too rigid, and although of many sizes, are unsuitable for the great variety of cases which present themselves to the operator. Two great classes might be made of these cases, those in which suffocation is produced irrespective of the relations of the larynx and trachea with the other parts of the neck, and which in many instances are not modified, and those in which the difficulty of breathing coincides with the presence of a tumor situated in front of the neck or on the sides of the trachea, changing thus the relations of the larynx and the trachea with the neighboring parts. In the first case, an ordinary cannula will in general be suitable, but it is not so in the second. About ten years ago M. Verneuil practised tracheotomy on an old cachetic woman who breathed with great difficulty by reason of an enormous goitre which produced such a deviation of the trachea that it was with considerable trouble he found the canal. Convinced that he would not be

able to insert the ordinary cannula, he procured one that was flexible, so that it could follow the curve of the trachea. The result was excellent, but the woman succumbed a few days subsequently. Ten days ago he had reason to employ again this flexible instrument. A man, æt. forty, of a very robust constitution, was brought to him with a sarcoma of the thyroid body, which produced intense suffocation. The trachea was hidden under the left lobe of the tumor. He laid bare the larynx with the thermo-cautery, and then incised the crico-thyroid membrane and placed the common cannula, but the depth of the wound was so great that the respiration could not be relieved, the operator then introduced the flexible instrument, an immediate relief was obtained, and the man considered to be out of immediate danger, but in half an hour the patient succumbed to an aggravated attack of suffocation.

In spite of the unfortunate termination of both operations, M. Vernëuil insisted on the superiority of the flexible spiral-shaped instrument.—Corresp., *Eng. Med. Press*, Nov. 2, 1892.

**White (J. B.) on Pneumotomy for the Relief of Tubercular Abscess and Gangrene of the Lung; Twice on the Same Patient.**—In a paper read at the recent meeting of the N. Y. State Medical Association White said that up to twenty years ago there had been nothing in surgical literature about the operative treatment of the lungs, and the credit of establishing a method of surgical treatment for defined diseases of the lungs belonged to Estländer. Although an ordinary abscess of the lung might terminate in recovery, no case of gangrene of the lung had been known to do so without surgical interference. After describing a number of recorded operative cases, some successful and others not, the writer narrated the history of his own case. The patient was a girl, aged thirteen years, and when first seen by him, in January, 1890, she was suffering from an acute broncho-pleuropneumonia, ingrafted upon an old unresolved pneumonia, which had degenerated into a fibrosis involving the right lower lobe and part of the middle lobe. He saw her next on June 26, 1890, in consultation with Dr. Pease, of Norwood. At this time a large area of the right lung had become gangrenous, and there was an abscess communicating with a bronchus. On the

following day, under anæsthesia, an incision was made in the sixth intercostal space, about an inch anterior to the axillary space, and, the finger detecting fluctuation, an opening was made and about two ounces of fetid pus were evacuated. She was immediately relieved, and under irrigation, drainage, and antiseptic treatment of the cavity she steadily improved until about three months after the operation, when it was found that the removal of the tube, a month previously, had resulted in reaccumulation of pus and a return of the constitutional symptoms. A second consultation, on September 22d, showed a favorable condition around the site of operation, but a region of decided dullness in the posterior part of the lower lobe, extending along the scapula. An incision was made into the thorax, an inch posterior to the axillary line, and a similar condition found to that which had existed at the time of the first operation. Fetid pus and portions of gangrenous lung were removed, and a drainage-tube was inserted. The cavity was frequently irrigated with a solution of peroxide of hydrogen, and often during these irrigations the patient would cough up some of the fluid. The drainage was continued for eight months. It was now two years since this operation, and her health was even better than it had been in her childhood, and menstruation, which had been arrested, had returned. The author said much care should be exercised in irrigating pulmonary cavities, but he considered irrigation less dangerous in gangrenous cavities than in those discharging laudable pus. Cases of gangrene of the lung were never too far advanced for surgical interference, even though showing profound sepsis. Pulmonary adhesions were not essential, and delaying for their formation might prove disastrous. In his opinion, the corrugated white rubber tubing was much better for draining pulmonary cavities than the ordinary rubber tubing, as it was not so easily compressed and was not unduly irritating.—*N. Y. Med. Journ.*, Nov. 26, 1892.

**Norris (H. S.) on the Internal Administration of Ozone in the Treatment of Phthisis.**—Author says: In November, 1891, my attention was called to a preparation of ozone called aquazone, which is a two-and-a-half volume per cent. solution of ozone in water, the stability of which is maintained

by the presence of a certain amount of hypophosphites. I was induced to take some to the hospital and try it for the night-sweats of phthisis. I had in my wards at the time some fifteen or twenty cases in all stages, and from the number selected two for the experiment.

The result in these cases was such that Norris was led to use the remedy in all forms of phthisis. The remedy was always given in the same manner, viz.: Twelve ounces of aquazone a day in four doses, one before each meal and the fourth at bed-time. An ounce and a half of ozonized oil, being half an ounce after each regular meal. It was not used in all the cases in the wards. Others were kept upon creasote and cod-liver oil in order to compare the two plans; but those upon the ozone seemed to do so much better than the others that he was frequently besought by these to be put upon the new treatment.

He further adds: The cases in which it has proved most successful in my hands have been in persons under thirty-five years of age with catarrhal phthisis, where the disease has not passed far into the second stage, has not been too active, and has been limited to a single lobe, or, if in both lungs, has been confined to comparatively small areas. In every case where these conditions existed the patient's improvement was immediate and progressive.

Of the fifteen cases reported I cannot say that a single one was cured, but such favourable changes took place that such a result might be expected if the use of ozone could be carried far enough. Of the number reported, two patients, who were in the last stages of the disease at the time of admission, died. This leaves thirteen in whom benefit was possible. Of this number, five gradually grew worse and were not favorably influenced by the treatment. All these patients had extensive disease of both lungs. One patient improved while under treatment, but the nature of his disease (extensive fibroid phthisis) and his age (fifty-three) precluded the possibility of complete recovery. In seven cases marked improvement took place; increase in weight, extending to over fifteen pounds in one case; diminution and even cessation of cough and expectoration; termination of night-sweats; and, finally, notable and favorable modifications of the physical signs, amounting

in two cases to their entire disappearance. —*N. Y. Med. Jour.*, Nov. 5, 1892.

#### **Einhorn (M.) on Gastrodiaphany.**

This procedure is practically a translumination of the stomach by means of a small electric lamp in the bottom of an ordinary rubber stomach tube. The latter is passed into the stomach in the usual manner and the current is then turned on. The stomach presents itself as an illuminated zone of a reddish hue on the abdominal walls; its contours can be discerned more accurately by pressing with the hand on the abdomen in the neighborhood of the translumination figure, or, speaking more correctly, by counter-pressing the stomach. By means of this manipulation the point in question is brought nearer to the source of light, in case the stomach is situated beneath it. Normally the translumination zone of the stomach is found in every individual.

It is of interest to observe that the stomach moves farther down during a forced inspiration—i. e., the translumination zone is seen to descend. During a strong contraction of the stomach the translumination figure becomes considerably smaller. This can be frequently observed as soon as the patient tries to vomit during the examination.

The value of gastrodiaphany consists of the following:

1. We are enabled to recognize quickly a dilatation of the stomach.
2. The condition called "gastroptosis" can with certainty be pointed out.
3. One is enabled to perceive tumors or thickenings of the front wall of the stomach by their lack of translucency. Whether indistinct translumination will also prove of some diagnostic value the future will have to show.

[This valuable paper deserves a careful perusal.—Ed.] *N. Y. Med. Jour.*, Dec. 5, 1892.

#### **Einhorn (M.) on the Use of the Spray in Diseases of the Stomach.**

Taking into consideration the scarcity of means we have at hand for the local treatment of the stomach, every endeavor to enlarge therapeutics in this respect must be welcome. By means of the spray we are enabled to cover large surfaces with a comparatively small amount of fluid. Thus, by this method we can apply directly medicaments of a toxic nature without fear of poisoning. The greatest gain of this

method has been achieved, as is well known, in the treatment of diseases of the throat.

It appeared important to me to make use of the spray in diseases of the stomach. The usual spray apparatus can be modified in such a way that, instead of the hard-rubber branch of the apparatus, the same branch is made of soft rubber and lengthened. In this way the gastric spray apparatus consists of the usual spray apparatus, in which there is a soft Nélaton tube, of seventy centimetres length, inserted between the hard-rubber spray end (one centimetre in length) and the hard-rubber branch running to the bottle, within the Nélaton tubing. Another soft tube of thinner calibre connects the inner capillary tube with the nozzle.

As the spray is generated by the air forced by the bulb through the tube, taking up the fluid and dividing it into fine particles, the medicament will necessarily come in contact with every part touched by the air.

If the stomach is empty when spraying, the air that enters will expand the organ and transport the fluid to every part of its interior.

The administration of the spray in gastro-therapeutics may perhaps be a suitable form for fulfilling the following purposes :

1. To disinfect the mucous membrane of the stomach.
2. To exert an astringent effect.
3. To produce analgesia in gastralgia of local character (from ulcer, cicatrix, or cancer).

*Method.*—As it is only possible to spray the stomach in its empty state, it will be necessary to administer the spray either when fasting or after a previous lavage.

A preceding lavage will always be indicated if we intend to disinfect or apply astringents, for in these instances it is necessary first to remove the mucus with the micro-organisms imbedded therein. In order to exert an analgesic influence, the lavage may perhaps be omitted.

After filling the apparatus with a sufficient amount of the required solution, the tube end is dipped into warm water and thereupon inserted into the stomach of the patient. It is best to begin with the spray as soon as the nozzle (being in the stomach) has a distance of about forty-five centimetres from the lips of the patient. Provided the nozzle is not covered by the

stomach wall, there can be heard during the spraying, at times in the neighborhood of the patient—otherwise by putting the ear on the gastric region—the sound characteristic of the spray. In case the opening is covered, the spray is generally unable to pass, and it then is necessary to insert the tube a little farther.

Even if the spray works well from the beginning, it will be expedient after a while to introduce the tube a little farther, in order to have the spray work from different points.—*N. Y. Med. Jour.*, Sept. 17, 1892.

**Barling (G.) on the Treatment of Perforated Gastric Ulcer.**—Abstract of paper is as follows :

1. Latent gastric ulcer, perforation, laparotomy, and drainage—six hours afterwards, intense peritonitis, death.
2. Gastric ulcer, perforation, mild symptoms at first, then more acute ones, laparotomy, and suture of the perforation on the fourth day, death.
3. History of gastric ulcer, symptoms of perforation, subsidence of these under treatment until the twentieth day, then recrudescence, laparotomy, and drainage, recovery.

The main features of these three cases were pointed out and certain conclusions from them. At least three conditions may be produced by perforation. (1) A very acute, wide-spread, rapidly-fatal peritonitis. (2) A circumscribed peritonitis which may eventually become diffused, that is in the course of a day or two. (3) A circumscribed peritonitis, often mild in its commencement, which eventually suppurates and gives rise either to an acute and fatal peritonitis, or perforates into an adjacent cavity, as the thorax or colon.

Treatment may be, simple incision and drainage of an inflammatory collection ; or laparotomy with irrigation and drainage ; or in addition the perforation may be closed by suture when this can be done.—*Birmingham Med. Review*, Nov., 1892.

**Hehir (P.) on the Salol Treatment of Cholera.**—In an epidemic in India in 1891 Hehir was called on to treat 68 cases. Of the 68 cases, 21 arrived at the hospital in the stage of collapse, of these 17 died. Of the remaining 47 cases, 42 arrived during the first stage, and 5 were moribund on admission. Of the 42 cases 26 recovered. It was markedly seen that those conveyed from a distance had the

least chance of recovery. Of 35 cases which had been carried over  $1\frac{1}{2}$  miles, 24 died. In 7 cases there was reactionary fever; all these recovered.

All the 68 patients were either paupers or low class Hindoos. These are, of course, the worst possible cases in which to give a drug a fair trial.

Ten grains of the drug were given every two hours to each case, with fifteen minims of spirit of chloroform. If rejected, it was repeated at once. No other drug was administered. Some cases received small quantities of brandy. In the shape of nourishment, iced milk and soda water, and cold *conjee*, were chiefly used.

The maximum quantity of salol administered in any one successful case was 310 grains, the minimum 20 grains. Contrary to what was observed in last year's cases, it was noted that secondary fever occurred in 7, or 26 per cent., of the recoveries, and uræmia in 4 cases, or 12 per cent.; yet convalescence was not attended with the other complications that frequently occur as sequelæ to cholera when treated by other drugs.

As a result of his experience Hehir does not regard salol as by any means the specific for the disease. It is no more useful than many other drugs in common use.—*Practitioner*, Nov. 1892.

**Salinger (J. L.) on Enteroclysis of Ice Water in the Treatment of Intestinal Diseases of Children.**—Various substances, antiseptic and otherwise, have been injected into the bowel. My plan has been to use ice-water. With its use I have observed the most beneficial effects in the treatment of intestinal diseases of children. My experience has been largely with children, and I have made an effort to treat only cases by this method which have proved very obstinate, and where other remedies usually useful have failed. Very few children will resist or offer opposition, and the method is very easy of application. The quantity of water that should be employed will vary with the age of the child. About one pint of water for a child six months old will be found to be sufficient. This amount should be increased to a quart for children two years of age. It is rarely necessary to give larger quantities than this.

I have used ice-water injections largely, and have never seen any ill effects follow. On the contrary, the patient seemed to

enjoy the cooling effects of the ice-water. For the treatment of intestinal diseases of children, and especially for the midsummer diarrhoeas, accompanied by vomiting, loss of flesh, and fever, it seems almost a specific. It has, to my mind, some very great advantages. The digestion of an already enfeebled stomach is not interfered with by prescribing remedies which are often in themselves difficult to digest and assimilate. Besides, the remedy may, in itself, be vomited, and so no benefit obtained. Secondly, the bowel is mechanically cleansed of masses of irritating, decomposing fæces, containing bacilli and their ptomaines, which, by their reabsorption into the system, give rise to dangerous, and often fatal, consequences. Lastly, the temperature is materially reduced by a harmless and certain therapeutic agent.

Ten illustrative cases are given.—*Therap. Gazette*, Nov. 15, 1892.

**Dreyfus (E.) on Dysentery and Ptyalism.**—Human nature is very perverse, but to show that this very perverseness may be utilized for a man's cure after all other means have failed, the writer cites the following case:

A patient named G—, by occupation a drayman, had been suffering for over a year with dysentery, in spite of all known remedies, which would control the disease for a time only, as he would disobey my instructions and pay no regard to the rules of diet set down for him.

I had become almost disheartened when the thought struck me that if I could control his diet I could cure him; accordingly on my next visit I ordered him to take fifteen grains of calomel and told him to drink as much iced lemonade and eat as many pickles as he pleased. The next morning I was hurriedly summoned and found him suffering from a beautiful attack of ptyalism, in consequence of which he was unable to eat anything but fluid and bland food for three weeks. His dysentery got well.—*N. Y. Med. Rec.*, Nov. 3, 1892.

**Fenwick (H.) on "Caisson" Work in Bladder Surgery.**—Before the Medical Society of London, Fenwick recently gave a description of what he called "Caisson" work in Bladder Surgery. To remove a small growth he made a limited anterior incision into the bladder and then sunk in an open cylinder somewhat like a Fergusson's speculum; this being pressed against the floor of the bladder over the

growth, the water was sucked out, and he operated under the direct influence of a powerful electric light. For these sessile growths under the old method a large incision into the bladder was required, together with a big rectal bag. With the method he demonstrated it was not only possible to remove the growth, but also to apply the

cautery with exactitude. He exhibited two patients from whom he had removed sessile villous growths by this method.—Mr. Swinford Edwards had found the method answer well in a case of vesicular carcinoma; it would also be useful for attacking tuberculous and other ulcerations of the bladder.—*Lond. Lan.*, Nov. 19, 1892.

## REPORT ON DISEASES OF THE NOSE AND THROAT.

BY CHAS. H. KNIGHT, M.D.

**Watson (W. Spencer) on the Influence of Nasal Stenosis on the General Health.**—In opening this paper the following propositions as to the functions of the nose are offered:

1. The inspired air is warmed to the temperature of the blood or within 1° or 2° F. of that temperature.

2. The inspired air is moistened by watery vapor exhaled from the nasal mucous membrane.

3. The inspired air is filtered and to a great extent freed from foreign particles and micro organisms. Some of these become adherent to the vibrissæ and some to the mucous surface, and in time are extruded with the mucus; the more irritating vapors or micro-organisms exciting a free flow of fluid mucus, which in extreme cases is expelled by sneezing or reflex cough.

4. The temperature of the blood is lowered by the evaporation from the pituitary membrane.

5. The expired air contains some carbonic acid (an appreciable trace), due to the interchange of gases in the nose independently of those due to oxidation in the lungs. There is also probably an evolution of other animal products from the same source.

Stenosis may be temporary, permanent, or partial. In the last-mentioned it is often difficult to determine to what extent coincident symptoms may be dependent upon the narrowing of the nasal passage. The rules of treatment, when bone or cartilage is not involved, observed by the author are these: (1) when obstruction is complete a single operation under general anæsthesia is preferable; (2) when it is partial, and constitutional disturbance is not marked, cocaine anæsthesia and the use of the snare or the electric cautery are indicated. Except in the simplest cases

repetition of the operation is necessary. The author also refers to asthma, hay asthma, stenosis in the new-born, adenoids, syphilitic disease, and malformations of the septum, and concludes that although absolute cures may be rare, yet immense relief may be given by removing nasal obstruction, and it is indisputable that in very young children deformity of the thorax with its attendant evils may be thus prevented, that in adolescents similar deformities, deafness, impairment to speech and of the mental faculties may be prevented, and that in adults we may prevent and sometimes cure asthma, spasmodic cough, bronchitis, emphysema, intellectual hebetude, and melancholia, etc.

In conclusion, I wish to make it clear that while I insist on stenosis being an important factor in many of the remote effects sometimes called reflex neuroses, I by no means wish to exclude the other factors. I think that in most cases of asthma, laryngeal cough, and spasms there is a clear neuropathic element, without which the total obstruction will have no effect; and I also believe that in some cases, such as those of hay asthma, a hyper-sensitive condition of the respiratory tract (and of the nose as part of that tract) is much more likely to be the starting-point of the remote effects than mere obstruction, though there seems good evidence that, even in these cases, obstruction aggravates the condition. All that I contend for is that intra-nasal obstruction is often an important element in the class of cases referred to; that it is often overlooked, or, if found, despised or made light of; and that it certainly should be sought for and dealt with by local treatment in a very large class of diseases in which, up to quite recently, its influence has been more or

less ignored.—*The Lancet*, Lond., Sept. 10, 1892.

**Gleason (E. B.) on the Control of Nasal Hemorrhage.**—A case of bleeding is recounted in which the hemorrhage was checked for some hours by packing with a loop of patent lint soaked in Monsel's solution, 1 to 3 of water. Such a plug has the advantage of being easily removed by traction on the ends of the strip of lint which protrude from the nostril. If the exact source of hemorrhage can be determined it may be controlled by pressure, and the discomfort of completely plugging the nostril may be avoided. The author appears to think highly of Monsel's solution, and refers to a medical friend who has never failed to control nasal hemorrhage with it in the proportion of one drachm to a pint of tepid water. Other hæmostatics are mentioned, among them ice, peroxide of hydrogen 4 per cent., cocaine, equal parts of tincture of the chloride of iron and glycerine, and fluid carmoline. The use of the latter was suggested by the success attending the insertion of pieces of fat pork in the case reported, which was one of hæmophilia.—*The Med. Bulletin*, June, 1892.

**Roberts (John B.) on the Cosmetic Surgery of the Nose.**—Operations often trivial may convert an ugly into a symmetrical nose. Even when more extensive, such operations, if properly performed, carry with them no risk to life. Hemorrhage of serious kind and violent inflammation are practically unknown. Much can be done to the nose, through the nostrils or mouth, without making an incision in the skin of the face. Cuts on the cutaneous surface are inconspicuous, or even invisible, when made in selected spots and with oblique division of the tissues, and when so treated that primary union is secured. Such incisions should be made in the normal lines of the skin, not across them, or should be placed in the situations where shadows, rather than strong lights, usually fall. Careful asepsis or antiseptis, oblique incision of the skin, fine catgut sutures, and iodoform with collodion as a dressing insure unnoticeable scars, even when the incisions are made in less desirable sites than those just mentioned.

Various deformities, such as result from syphilis, from fractures, from interstitial overgrowth of the triangular cartilage, from tumors, tubercular excrescences, and acne,

are referred to and the methods of treatment are indicated. In all cases of chronic ulceration of the nose, doubtful in character, it is the rule of practice with the author to give a third or a half of a grain of green iodide of mercury before meals and twenty to thirty grains of potassium iodide after meals for a period of ten days. If such a practice were universally adopted most of the frightful deformities so familiar might be avoided.—*Four. Am. Med. Ass'n.*, Aug. 20, 1892.

**Weir (R. F.) on Restoring Sunken Noses without Scarring the Face.**

—This paper describes the procedure of König, modified by Israel, for restoring a sunken nose, which is objectionable on account of the disfiguring scars which result. Moreover, the thin portion of bone carried down with the frontal flap sometimes undergoes absorption and the original deformity is eventually reproduced. Raising a flattened bony ridge by chiselling and the insertion of a retention pin is comparatively simple, but the question of restoring a sunken central cartilage has hitherto been very perplexing. The author's experiment with flaps taken from the cheek was not a success, and he describes in detail a case in which he used the sternum of a duck to fill the gap, which was also a failure. The notes of a very satisfactory case are given in which he used the platinum bridge suggested by Martin and endorsed by Ollier. This apparatus is inserted without external incision, the lip and the tip of the nose being separated as in Rouge's operation, and is even without irritation or discomfort.

In operating for a twisted nose resulting from deviation of the cartilage and perhaps of the bony structures a good deal of interference is required. Complete restoration must be secured at the time of the operation, and no reliance must be placed on forcible retention from pads or apparatus. Plugs of iodoform gauze or other material, such as come covered with collodion, as proposed by French, are only serviceable to prevent the nose from being displaced by incautious movements or other accident. The flattening of the nose sometimes following an operation for hare-lip may be corrected by detaching the depressed ala by an incision along the gingivolabial furrow and suturing the loosened ala as near as may be desired to the opposite ala.—*N. Y. Med. Jour.*, Oct. 22, 1892.

**Williams (P. Watson) on Hay Fever and Hay Asthma.**—Clinically we may arrange paroxysmal sneezers in three classes: (1) those in whom the lesion is entirely peripheral, such as the earlier and milder forms of true hay fever, in which the symptoms appear only when the patient is exposed to pollen, etc., and for these local treatment rarely fails; (2) those in whom the symptoms, in the first place induced by peripheral irritation, have become more or less persistent, even in the absence of any pollen or special irritating particles; (3) idiopathic cases, not due to peripheral irritation at all.

In discussing the causes the author alludes to predisposing, such as individual idiosyncrasy, or nervous temperament, and local. Heat and dust aggravate an attack, but alone cannot produce it.

The abnormalities that are met with in hay-fever subjects are: (1) those known generally by the term hypertrophic rhinitis, in which the mucosa of the floor and of the septum, but especially the tissue covering the inferior and middle turbinated bones, is thickened or unduly vascular; (2) spurs and bony projections of the turbinated bones; (3) deviations of the septum, causing partial or complete occlusion of one nasal passage; (4) polypi and adenoid hypertrophy of the naso-pharynx; (5) peculiarly sensitive areas in the lower half of the septum and the floor of the nasal fossæ. Chronic pharyngitis with relaxed fauces and elongated uvula are frequently set up by repeated attacks, and more or less persistent asthma, and consequent bronchitis are not unusual in the graver cases.

Yet the anatomical-lesion theory does not explain the disease, since it appears that three factors are essential to the development of symptoms. (1) the predisposing constitutional condition; (2) an external irritant, viz., pollen of grasses, etc., in hay fever, of roses in rose fever (the rare instances of asthma induced by the presence of dogs or cats or horses are analogous cases); (3) a pathological condition in the nasal passages, forming or causing a sensitive area.

After having described the symptoms, the author passes to a consideration of the treatment.

During the paroxysms of hay asthma, palliative treatment alone avails, but a great deal may be done towards warding

off the attacks by the administration of strychnine and arsenic in *small* doses. Sedatives, unfortunately, always leave the patient worse for the remedy, even if it has been necessary for temporary relief; and when, as is often the case in asthma, their frequent repetition is called for, the amount of harm they do is no light matter.

Local treatment may be radical or palliative. When there exist sensitive areas and simple thickening of the mucous membrane the author has had the best results from spraying the nose with a solution of "iodic-hydrarg.," a soluble preparation of iodide of mercury, after an application of cocaine. The pain is intense for two hours after the effects of the cocaine have passed away, and the use of morphine is often necessary. For twenty-four to thirty-six hours thereafter a condition like that of nasal catarrh persists, and in suitable cases if the application has been efficiently made the patient will remain free from hay fever throughout the season. The sense of smell remains unimpaired and there is no destruction of tissue. The *modus operandi* of this treatment resembles that suggested by Sir Andrew Clarke, whose solution is composed of glycerine of carbolic acid, quinine, and perchloride of mercury. From the latter Morell Mackenzie never had any results. Macdonald has seen benefit from very weak chromic acid solution. Hyperæsthetic and hyperplastic areas should be destroyed with the electric cautery. Indiscriminate burning is deprecated. Polypi should be removed, bony spurs cut off, and deviations and prominences of the septum should be remedied. Palliative measures are unsatisfactory, and require frequent repetition. The various well-known agents are referred to, and among them cocaine is unreservedly condemned.—*Bristol Med.-Chir. Jour.*, July, 1892.

**Gardner (Wm.) on Sarcoma of the Tonsil.**—The tumor, a round-celled sarcoma of the left tonsil, was removed by external incision after a preliminary laryngotomy. Two years later a suspicious tumor appeared in the left axilla, together with a glandular swelling at the angle of the jaw on the left side, the latter attended by considerable general induration. The axillary tumor was removed, and although at first appearing like a sarcoma it was finally pronounced an abscess, the wound healing in two days. The cervical swelling



disappeared. There was no recurrence. —*The Australian Med. Jour.*, June 15, 1892.

Dr. Henry O'Hara (*Austral. Med. Jour.*, Aug. 15, 1892) reports a case in which the disease was much more extensive than in the preceding, an external operation being supplemented by the use of the thermocautery. In about four years the patient died from secondary deposits in the lungs.

In the *Internat. Med. Mag.*, July, 1892, Dr. B. F. Curtis describes a case upon which he operated by a modification of the method of Mikulicz. The patient was a woman of fifty-three, who had been suffering for six months with what was supposed to be tonsillitis. The tumor was the size of a pigeon's egg. The mucous membrane was unaltered, except for very limited ulceration at one point. Pain had never been

severe enough to require morphine. The steps of the operation are given in detail.

#### Ingals (E. Fletcher) on Cancer of the Tonsil Treated by Lactic Acid.

—A case is reported in which the right tonsil, the anterior pillar, and the uvula were involved in sarcomatous disease, which was removed as thoroughly as possible with the cold wire snare. The cervical glands were not involved. A month later there were indications of recurrence. A sixty per cent. solution of lactic acid was applied, and afterwards on several occasions interstitial injections of twenty to fifty per cent. of the acid were used with the effect of keeping the disease in check. Ten or fifteen minims are used at a time, and morphine is required to relieve the subsequent pain. —*N. Y. Med. Jour.*, Dec. 10, 1892.

## REPORT ON ORTHOPÆDIC SURGERY.

BY HENRY L. SHIVELY, M.D.

### Ridlon (J.) and Jones (R.) on Chronic Joint-Disease Symptoms.—

The majority of cases fall into one or the other of these classes: (1) primary synovial disease of non-traumatic origin; (2) bone diseases either from primary infection or secondary to disease in other tissues, associated or not with traumatism; and (3) a purely traumatic lesion which in course of time has become chronic from lack of treatment. The first class presents, often for a time, only a distended joint capsule, the normal bony outlines being indistinct or completely lost, with true or false fluctuation on palpation. There is no local elevation of temperature to the touch, no limitation of normal motion beyond that due to the mechanical distension of the parts, no muscular atrophy, and no limping except after prolonged use. The second class presents no distension of the joint and no swelling anywhere in its early stage; there often is local heat, though this may be absent, while a tender point can often be made out in superficial joints; limping begins early and is pretty constant, though there may be intermissions in some cases; muscular atrophy comes on early and is a constant symptom, and pain comes on after a time in most cases, though it may be absent all through the disease. In the

third class there is swelling, infiltration of the tissues about the joint though neither true nor false fluctuation is present, increased heat which can always be felt, pain of an aching nature which is almost invariably present, muscular atrophy and rigidity which are always found, and finally there is a general tenderness to pressure rather than a small sharply defined tender point. As the disease progresses in either class the three pictures above shown form a composite presenting the sum total of all the positive symptoms, while prolonged muscular spasm results in deformity: extension of the foot when the disease is at the ankle; flexion with outward rotation of the leg, and later in knee, where the knee joint is involved; flexion of the thigh on the abdomen with occasional abduction or adduction where the hip is diseased; an arch or an angle opening forward in disease of the spine with or without lateral deviation and torsion; flexion at the wrist and at the elbow, and in a hugging of the arm to the side in disease of the shoulder. Long-continued faulty position results in contracture of all tissues on the side of the opening of the angle (or arch) of the deformity. Abscesses form in many cases. General infection or cerebral meningitis supervenes in a small percentage of cases, and this

more frequently after slight scrapings and stirring up of the tubercular material than after the most formidable excisions. Death has too frequently followed the scraping of a small bone cavity after the removal of its sequestrum or the scraping of an old sinus to leave any doubt upon this point.

*Prognosis.*—Other things being equal, the younger the patient the shorter will be the duration of the disease, and the better will be the functional result whatever plan of treatment be adopted. Smaller joints recover more quickly and perfectly than larger ones. A certain number of cases recover, either under mechanical treatment or under operative treatment, or without any treatment whatever, with joints in fair position and possessed of good range of motion; and suppuration, whether treated or untreated, is no bar to this result. On the other hand, certain cases, no matter how early treatment be commenced or how carefully carried out, will go on to recovery with short limbs and stiff joints, or ultimately to death. The duration of the disease in individual joints or particular patients cannot be accurately foretold. Relapses rarely occur if the surgeon recognizes the signs of perfect recovery. The cases that relapse after mechanical or operative treatment are those in which treatment has been suspended before the articulation has regained its soundness.

*Treatment.*—That the best obtainable hygienic surroundings play an important part in the treatment, does not need to be dwelt upon, but the beneficial effects of abundant sunshine and pure air should not be attributed, as they altogether too frequently are, to any exercise which the patient may take while out of doors. Voluntary physical exertion is not essential to the perfect action of any of the vital functions or to the prolongation of life even in a healthy individual, much less is it requisite for the eradication of disease and the restoration of tissues destroyed by disease. Every one knows the importance of rest to the part and to the whole man in the cure of disease, and that this application of rest is most imperatively invoked in the restoration of solutions of continuity of the human frame, in the healing of wounds, whether natural or artificial. No one questions the necessity of keeping a fractured bone at rest until healing has become perfect, or of controlling, with equal vigilance, the person of a patient afflicted

with a continued fever; and there appears to us no valid reason why diametrically opposite principles should prevail in the treatment of joints where both loss of bony continuity and fever are often prominent symptoms. Such, however, has been the case. Despite these clear indications, supported as they are by the unanimous testimony or the surgical experience of all past time, one finds the principle of rest too often wholly neglected or only half-heartedly carried out; for we are constantly met by the arguments of those who look upon exercise both of joint and patient as essential to recovery. If rest be advised, it is so imperfectly adhered to as to render it of little avail.

A swollen and tender joint should be immobilized as carefully as if it has been sprained. A joint partially protected from motion by involuntary spasm of the muscles should be more perfectly protected by some mechanical device. When movement causes pain in spite of the protecting muscular spasm, it should be prevented as carefully as when a like condition obtains in fracture; this demands recumbency when the lower extremities or the spine are the seat of the disease, but in the upper extremity a mechanical device may be sufficient without recumbency. When pain is severe or continuous enough to materially affect the patient's health, as indicated by either loss of sleep, appetite, or bodily weight, freedom from exercise and absolute rest in bed are clearly indicated. When the patient is feverish he should be kept in bed, and as absolutely at rest as with any other fever of equal severity. If there be a solution of continuity in any of the tissues, healing will take place most rapidly, if the part be kept at rest. All wounds, whether the result of the surgeon's knife or of spontaneous evacuation, require rest for their rapid and perfect healing, and wounds resulting from tissue destruction by the encroachments of tubercular growths are no exception to this law. The materials to be used for securing local rest are of as little importance in principle as are the materials used in the construction of the bed upon which the patient lies, to secure general rest. The essentials are that the framework be firm, unyielding, and free from tremor; that the padding be sufficient to protect the soft parts from harmful pressure, nor yet so soft nor so thick as to diminish the effectiveness of the rigid frame.

The covering material must be of such a nature as to be well borne by the skin, and not be readily injured or rendered baneful by secretions or excretions. It should be so applied, if possible, as not to circumferentially compress the part diseased, for such compression delays the healing process as effectually as it checks growth. All local applications to the skin (with the exception of mercury in the children of syphilis) are not only useless but harmful. Any foreign body, such as dead bone, cheesy focus, or abscess contents, that the surgeon considers must be removed before a complete healing can result, should be got rid of as soon as it can be diagnosed, and with the least possible laceration of the surrounding parts: a knife and chisel always being used in place of a spoon and saw. The greatest gentleness and swiftness should be exercised, and all stretching and scraping or other mangling of the tissues should be as carefully avoided as if the patient were not under the influence of an anæsthetic. Fragments of dead bone should be removed only when they can be separated from the living bone. Dead bone still attached to living bone should not be scraped with the so-called sharp spoon. The local disease, it is true, may thus be cured, but the patient may be killed by general infection due to the disturbance of tubercular material, and it is slight credit to have performed a successful operation on a patient who died as a result of it.

With regard to the cheesy foci in bone, their precise location and number can rarely be determined, nor can it be generally known, whether they should be evacuated, or if they will not ultimately disappear in the growth of healthy granulation tissue. As a rule these should be left alone. With regard to tubercular abscesses, there are three plans of treatment; (1) To open with or without an attempt at removal of all diseased tissues; (2) to aspirate with or without the injection of some medicament, as iodoform in glycerine or oil; (3) to leave the abscess alone for spontaneous opening or re-absorption. Clinical observation has shown that, the earlier the abscess cavity opens or is incised, the more surely does it lead down directly into the joint or the cheesy cavity in the bone. At that stage erosion of all diseased tissue is much easier than at a later time, but at the same time the risk to the patient in case of accidental septic infection is a very serious

one. As already indicated, the course of these abscesses when left untreated is downward and away from the joint. In time the opening, leading from the joint or bone-cavity to the abscess sac, becomes partly or completely closed by granulations; even the original site of the abscess may have healed and the nearest point of the abscess-cavity may be some inches from the point or original focus. The complete removal of all tuberculous material may now be a much more difficult process because of pockets and partly obliterated tracks, but the risk to the patients from septic infection is little. In the operative treatment of these abscesses the necessity of certain removal of every particle of tubercular membrane has been urged, but, judging from the manner in which bone-cavities and joints heal and cut themselves off from the abscess-cavity; in which the walls of the abscess-cavity close above, as the contents descend to a lower level; in which cavities and sinuses, where there have been spontaneous openings, close when no longer leading from diseased bone; in which these abscesses disappear at times after aspiration; in which even very large abscesses at other times disappear without opening or ill-effect to the health of the patient; and judging from the results of operations, it would seem that extreme gentleness, in erasing the tubercular membrane so as not to wound the normal tissues, is of greater importance than vigor in the use of the sharp spoon. In recapitulation we may say that tubercular abscesses arising in connection with chronic joint disease are strictly aseptic; that incision, and especially early incision, is hardly ever called for; that incisions add very materially to the risk in many cases where it might be expected to be of advantage; and that it is therefore rarely required in those cases where it can always be safely performed, and when performed, the cleansing should be done with only a stream of water, using the pulp of the finger at most, to avoid all wounding of the healthy surrounding tissues; that this gentleness is of far more importance than thoroughness of erosion; and that the wound should be closed unless very extensive bone disease be present, and then it is better left open without any drainage-tube. Abscess cavities may be aspirated, but even a moderately complete evacuation is often impossible because of the clots of fibrin which plug the needle. If successfully aspirated, they

usually refill again and again until spontaneous opening, septic infection, or incision ends the farce. When aspirated as thoroughly as possible and injected with a sterilized mixture of iodoform in glycerine or olive oil they close more frequently than when simply aspirated, and, in closing, are accompanied with more shrinking of surrounding tissues; whilst the risk from septic infection remains much the same. Left without operative interference of any kind, even large abscesses not infrequently disappear, and small ones when the part is at perfect rest, disappear in about 50 per cent. of all cases. When spontaneous opening does occur, the patients rarely show constitutional symptoms of septic infection; the abscesses run quite as short a course and heal quite as well as those that have been operated upon and have failed to close by primary union.

So-called erosion of the joint is rarely, if ever, a justifiable operation. There is no certainty that all of the tubercular material has ever been removed by this operation, and the risk of general tubercular infection is great. No better results are gained by its employment than by excision, whilst the risk is much greater. Excision may be justifiable as a time-saving measure in the case of a laboring man, but it is often of doubtful utility then. Any case that can be cured by excision, can be cured with a better functional result without it. Excision in the lower extremity means confinement in bed for not less than eight weeks, the results being a limb which will not bear the strain of severe labor for a long period, a stiff joint, a short leg, and a very considerable risk of relapse. An equal period of rest in bed, and careful use under efficient fixation would, in our opinion, give a limb which, under such continued treatment, would prove as useful during the remaining period of convalescence as the best result of an excision: and when cured would not be materially shortened, and, in very many cases, would have motion at the joint. In adults we leave the choice of the result to the patient himself, but in children the operation should never be performed; for, in addition to the result above indicated, there remains a gradually increasing further deformity from arrest of growth, which may, when the full growth of the patient has been attained, be so extreme as to render the limb wholly useless. We are inclined to believe that any joint in growing chil-

dren, that cannot be cured without excision, demands amputation. The best results from excision are at the elbow, so are the best results of the non-operative treatment. The next best results are at the knee, and the same holds good of the mechanical treatment. As to amputations, they are always indicated as life-saving measures; and, we believe, should never be nearer than three inches from a joint, except at the hip and shoulder.—*Prov. Med. Jour.*, Oct. 1, 1892.

**Lovett (R. W.) on the Classification of Hip Disease.**—Four well-marked types of the disease are to be distinguished, viz.: (a) the destructive form, (b) the painful form, (c) the painless form, and (d) the transient form. Under the first head are included those cases in which there are usually a tubercular inheritance and poor vitality, in which there is much thickening of the circumarticular tissues even in the very early stages, and where abscesses and high temperature usually cause rapid wasting and death from exhaustion. Its subjects are peculiarly liable to tubercular meningitis, or, if they live long enough, are prone to amyloid disease. The disease in some cases is probably an acute infectious osteomyelitis or a pyæmia which is not produced by the tubercle bacillus; but in other cases the tubercular formation is peculiarly rapid and extensive, and the process is comparable to the rapid form of pulmonary tuberculosis. The "painful form" is the common type of the disease, and in addition to the malpositions of the limb which are present and which yield readily to treatment, there are abscesses, and the disease runs a fairly rapid course. In the third form pain is not a prominent symptom, although "night cries" may be present at times. It is a well marked and distinct type, which is less common under six years of age than the preceding form, and runs a longer course. Muscular spasm is a very prominent symptom, the whole joint being rigidly fixed; in fact there is not so much joint motion in any stage of the affection. Malformations occur slowly and yield very slowly to treatment; atrophy and shortening are more marked than in any other form of the disease, and the functional results are not so good. This variety of hip disease is probably a fibroid form of bone tuberculosis, the foci being surrounded by less irritation and hyperæmia. In the fourth, or "transient form," the

ORTHOPÆDIC SURGERY.

ns are not characteristic, and, of these cases there was a symptoms closely simulated the synovitis. It is probable disease is in a part of from the joint.—*N.* t. 1, 1891.

**Foot.**—Followology, in which v of arrested session of the es that in h was at he foot rrec of z- cases, ated out, u than where the foot were *San Medical Journal*,

#### on the Expectant Treatment of Hip-Joint Disease.—The

or's paper is summarized as follows:

1. Hip disease when seen in the early or first stage is often amenable to mechanical treatment.

2. Although in the early stage the bacilli may frequently be absent, the joint should be treated from the beginning as though they were invariably present.

3. An important course of the extension of the disease is the irritation due to pressure between head of femur and acetabulum.

4. This is best prevented during the acute period by rest in bed, with fixation of the body by a long splint to the sound side, and longitudinal and transverse extension by weight to the diseased joint.

5. As soon as the early symptoms have quite subsided, the patient should be fitted with a long traction and fixation splint, and not allowed to rest for one moment on the diseased joint until completely cured.

6. After indications of softening have become apparent and persistent, expectant treatment is no longer indicated.—*The Canadian Practitioner*, Sept. 16, 1892. (From this last conclusion most orthopædic surgeons would emphatically dissent. The majority of cases developing abscesses, especially children, do extremely well with mechanical treatment alone. Indeed supuration rarely has any unfavorable influence whatever on the general progress of the case. H. L. S.).

## REPORT ON PATHOLOGY AND PRACTICAL MEDICINE.

### Touch and Temperature Sense.—

An interesting case, illustrating peculiarities in sensory perception, is recorded by Cavazzani and briefly mentioned in the *Neurologisches Centralblatt*. It is that of a patient whose median and ulnar nerves had been injured and then sutured. On testing the sensibility after this it was found that in certain areas where the temperature sense was retained there was no sensibility to ordinary impressions, and in other areas the converse was the case, thus giving support to Goldscheider's idea that the end-organs and conducting paths are different for the different kinds of sensibility. As, too, there were areas where only cold was perceived, while tactile and thermal impressions were not felt, it seems as if there were separate paths for heat and cold. It was also curious that a trial made when the patient was about to leave the hospital at a time when he was somewhat excited should have furnished results not quite the same as those obtained before—a change which

is ascribed to the altered condition of the nervous centres due to the excitement.—*Ed. Lond. Lan.*, Oct. 29, 1892.

**Billings (J. S.) on the Causes of Outbreaks of Typhoid Fever.**—In an investigation as to the causes of a limited outbreak of typhoid the first thing to be done is to obtain a brief history of each case, including: 1, evidence that the disease was typhoid; 2, the date of the beginning of the sickness; 3, the places where the person was within the limits of the period of incubation, *i. e.*, from eight to twenty-five days. If the majority of the cases first appeared within a period of three or four days, with two or three cases a day or two earlier, and several cases during the following week, it is probable that the cause was a single pollution of the water-supply or the milk-supply, lasting only a day, or, perhaps in the case of the water-supply only an hour, and that the differences in date of appearance of the disease are due to differences in the incubation period, produced

by variations in either the dose of the poison or individual susceptibility. In such case the date of the temporary pollution will be nine or ten days prior to the middle of the three days in which the greatest number of cases first appeared. If there were but one or two cases at first, then between ten days and two weeks afterward several more, and then, after a similar interval, another group, it would point to conveyance of infection from one of these groups to another, not through the general water-supply or milk-supply, but through soiled clothing, food, etc.

If the cases occurred continuously, day after day, not varying greatly in number each day for a week or more, it would point to some cause that continued to act for that length of time. Having obtained a general idea of the course of the outbreak, probably the next thing to consider is whether there is a general or local water-supply, and what proportion of the people using each supply were affected with the disease. If 5 per cent. or more of those using a given water were affected, the probabilities would be that the water was the means of conveyance of the germs, and special investigation of the water would certainly be necessary. If less than 1 per cent. were affected, the specific contamination of the water would be doubtful; if less than four in the thousand were affected, the cause of the disease would probably not be in the water-supply. Here, however, the immunity produced by an attack of the disease must be taken into account, a very large number of persons in cities that have had a polluted water-supply and a large amount of typhoid for several successive years being thus immune.—*Phil. Med. News*, Nov. 26, 1892.

**Johnson (R) Traumatic Epithelial Cyst.**—At a recent meeting of the London Pathological Society a specimen of this nature was exhibited:

Cyst removed from the hand of a boy aged ten years. The boy had fallen two years and a half previously, inflicting a small wound on the upper part of the thenar eminence of the left hand. A swelling had slowly formed beneath the scar. This was exposed by a short incision and found to be an oval cyst, pearly white in color and three eighths of an inch in diameter. It lay in the subcutaneous fat and was unconnected with the skin. Ex-

amined microscopically, there was found to be a complete absence of fibrous tissue from its wall. Externally there was an epithelial covering consisting of several layers of small cells, and within this were laminæ of horny epidermis. The contents consisted of epithelial scales and granular débris; there was no cholesterin. It was peculiar that no fibrous wall had formed around it, and the name "epithelial cyst" seemed no more applicable to it than "dermoid." The occurrence of dermoid cysts on the fingers in positions not explicable on developmental grounds had been long recognized, and there was sufficient evidence to indicate their relation to antecedent injury. Reference was made to such cases recorded in the *Pathological Transactions*—a case under Mr. Poland in which a cyst developed on the finger in the position of an injury from a piece of sharp steel three years previously; a case under Mr. Bowlby in which frequent pricks with a sewing-needle seemed a likely cause; and, lastly, a case reported by Mr. Barker in which the cyst developed in a finger the end of which had been amputated for injury some years previously. Polaillon (quoted by Mr. Bland Sutton in his *Hunterian lectures*) described dermoid cysts of the fingers. He mentioned that they occurred in soldiers and workmen, but gave no definite history of previous injury in the cases recorded. Mr. Sutton had also described specimens in sheep and oxen in which injury seemed a likely cause, more especially in the case of a cyst from the shoulder of an ox. It was easy to understand how a small mass of epithelial cells driven into the subcutaneous tissue would, in the course of their growth, develop into a cyst.—Mr. Sutton said that in more than one case related the tumor consisted of a tucking in of the whole thickness of the skin. He had examined an implantation cyst from an ox which contained hair and one from a sheep which was filled with wool. Lately he had seen another variety in which the implanted structure had grown as a large wart, only that it was upside down and penetrated far into the deeper tissues. Sometimes, after a punctured wound of the cornea or after a cataract operation, the growth of such a cyst might be witnessed from an epithelial graft accidentally implanted on the iris.—Mr. Barker said that in the case he had shown there was a very tough fibrous layer ex-

ternally, then came a layer of ovoid cells and then the horny layers; the cyst was full of cholesterin crystals.—Mr. H. B. Robinson referred to a paper by Mr. Stabb in which he described two such cysts, one in the palm of the hand and one in the finger. He himself had removed one from the forehead. There was in that case no history of injury, but it was in structure like those described. The interior of the cyst contained cholesterin.—*Lond. Lan.*, Nov. 5, 1892.

**Ruffer (M. A.) on Parasitic Protozoa in Cancerous Tumors.**—After alluding to previous publications by Walker and himself, Ruffer says that in the first paper it was stated that they were unable to find parasites in the nuclei of cancer cells. In this they agreed with all other observers. He adds:

Since then I have seen the intranuclear stage of the parasite, and it is of these recent observations that I now wish to say a few words. I first saw this intranuclear stage of the parasite in carcinomata of the breast, and the most numerous instances of it were found in an extremely soft and fast-growing cancer removed by Mr. Christopher Heath from the breast of a middle-aged woman. Pieces of the tumor were at once plunged into each one of the following hardening reagents: (1) absolute alcohol; (2) alcohol 1 in 3; (3) 3 per cent. chromic acid solution, to which a few drops of formic acid had been added (Rabl); (4) Fol's solution; (5) Fleming's solution; and (6) 1 per cent. osmic acid solution. Of all these pieces, those fixed with Fol's solution and with 1 per cent. osmic acid revealed the presence of the intranuclear parasites best, whilst the other fixing fluids gave but poor results, even with the most varied methods of staining. In osmic acid preparations, indeed, the intranuclear parasite was well seen, even without the use of any coloring reagents, and could easily be demonstrated with hæmatoxylin and more especially with Ehrlich's hæmatoxylin. The same result was obtained in other carcinomata fixed in the same manner.

"The parasites first appear in the nucleus of the cancer cell as hard, dark-staining, small, spherical bodies, almost indistinguishable from the nucleolus of the cell. They scarcely ever occur singly, but are found in groups of two, three, or more, and I have seen over 20 of them in the

same nucleus. The nucleus when filled with these spores appears as a hard, dark-brown mass with irregular outlines.

"In a further stage the organism becomes more transparent, and still later a dainty, small nucleus appears in the centre of each parasite, the surrounding capsule at the same time becoming distinct. The nucleus of the cancer cell is then often filled with these small bodies, each showing the capsule and little nucleus above mentioned, though the rays present in the fully developed organism are not often met with in the young parasite. Not infrequently, however, one of the parasites increases at the expense of its fellows and becomes much larger than the others.

"The parasite, or parasites, now gradually approach the periphery of the nucleus, and make their escape into the surrounding protoplasm. Every stage may be seen, sometimes even in the same section, from the time when the parasitic organisms are in the interior of the nucleus, passing through the stage when they are partly in and partly out of the latter, to the stage when they escape into the protoplasm of the cancer cell. At the same time the parasite gradually increases in size.

"When the nucleus is absolutely crammed with parasites one side of it gives way; it bursts like any other parasitic cyst filled with spores, and its contents are discharged into the protoplasm of the cancer cell. Such a nucleus generally perishes, though this is not the case with the nuclei containing one or two parasites only. These generally appear to heal up perfectly, and present a good field for the study of a subject absolutely unexplored hitherto—namely, the process of repair of an injured cell.

"I have now, therefore, seen every stage in the life-history of the protozoa of cancer, from the time when the parasite appears as a spore in the nucleus to the time when it leaves the latter as a young, fully-formed parasite. The other stages in the life-history of the parasite are still obscure, but I have hopes that this problem will now soon be solved.—*Brit. Med. Journ.*, Nov. 5, 1892.

**Monro (T. K.) on Brains Prepared for Use as Dry Specimens.**—The specimens were exhibited before the Glasgow Medico-Chirurgical Society for the purpose of illustrating the methods of preparation described below.

The first was produced by a method recommended by Giacomini, being saturated with glycerine after hardening in alcohol. The details of the process may be varied considerably, but the plan I adopted was as follows: The brain was lifted directly out of the cranium at the time of the post-mortem, and placed in a strong solution of chloride of zinc, where it was allowed to remain till it sank. It was then transferred to methylated spirit, in which it lay for several weeks, the spirit being changed occasionally. The brain was next put in glycerine for a month, and then placed so as to drain in the open air. After a week it was varnished.

The second brain, which is in three pieces, was prepared by Schwalbe's method. After hardening, like the other, in zinc chloride, it was thoroughly washed in water. It was then kept for some weeks in methylated spirit (occasionally renewed), and then completely dehydrated with absolute alcohol. The next part of the process was to clear it by immersion for several weeks in turpentine, after which it lay for a week in a large pot containing melted paraffin wax, which was kept hot by a lamp burning under it continuously day and night. Finally, the superfluous paraffin was drained off the brain by the aid of heat. This brain has been varnished, but that was not essential.

Both of these brains are well adapted for showing the convolutions and the gross anatomy in general. The one which is prepared in glycerine (Giacomini's method) is but little shrunken, and, though bleached, preserves very much the appearance of a normal brain. The mode of preparation is inexpensive and gives very little trouble. Schwalbe's process gives a capital result too, but the brain looks more like a wax model. It is very hard, of a yellowish-brown color, and considerably shrunken. The method of preparing it is rather troublesome, and the absolute alcohol employed at one stage in the proceedings adds a great deal to the expense. Still I think the result is highly satisfactory in both cases.—*Glasgow Med. Jour.*, Nov., 1892.

**Brady (E. T.) on Vertigo.**—In a recent discussion on this topic before the Virginia Medical Society, Brady spoke of vertigo as gastric, cardiac, cerebral, laryngeal, ocular, aural, toxic, epileptic, and essential, and stated briefly the characteristics of each. He held that laryngeal

vertigo was but a form of epilepsy, and as we progressed in diagnostic powers, the toxic form would be found to include the larger number. He stated, as his belief, that a far greater number of cases of vertigo were due to nervous causes than to any disturbance of the intra-cranial circulation. The effect upon the nerves might be produced by one of three causes—(a) the direct mechanical or chemical effect of poisons, or imperfectly oxydized materials accumulating in the blood; (b) pressure upon the centres governing equilibrium; (c) reflex, from acute localized inflammations, the equilibrium centres being disturbed by unusual impressions caused by and deflected from associated nerve-fibres. In speaking of the gastric form, he called attention to the fact that it was not with violent indigestion, but rather with *prolonged or delayed* digestion, that it was most apt to be met with. In mentioning aural vertigo, he called attention to the fact that deaf-mutes were free from vertigo; and he seemed to infer, from this fact, that the sense of hearing enters largely into the causation of vertigo. He omitted epileptic vertigo from the discussion as being a variety of epilepsy, and as deserving of more detailed treatment than could be accorded it in so limited a space of time. He said but little as to treatment, except to recommend a trial of cocaine locally in Ménière's disease, and suggest the advisability of producing deafness in intractable cases. He closed with some remarks as to general treatment, especially commending pepsin, pancreatin, and lactic acid.—*Va. Med. Month.*, Oct., 1892.

#### **Dana (C. L.) on Central Glioma of the Cord, with Hemorrhage Within.**

—Dana recently presented two specimens of this condition at the Practitioner's Society. The first was a case of central glioma and hemorrhage within. The case was of historic value. He had seen the patient (he was a man, aged forty-five) two years before, with a history of spinal trouble supposed to be transverse myelitis. The man partly recovered from pain in his legs. He had exaggerated reflexes and other signs of transverse myelitis. He left the hospital and returned about two weeks ago with a history of agonizing pain around his body, paraplegia, anæsthesia, atony of the bladder, but no fever. He died exhausted by his pain. The autopsy revealed in the middle part of the cord a fusiform



enlargement, which was found filled with clot running up and down the cornua for four or five inches in one horn.

The dura, externally, and pia were normal. The fusiform enlargement extended for three inches. The history seemed to show a repetition of the former condition of the pain. The diagnosis was originally probably glioma, with hemorrhage and enlargement; secondarily, a repetition of the hemorrhage, and death. It was unusual, because hemorrhage of the cord was regarded ordinarily as not painful.—*N. Y. Med. Rec.*, Nov. 26, 1892.

**Putnam (J. J.) on Another Case of Chronic Neuritis Following Influenza.**—Since my paper which appeared in the *Journal* of October 13th was written, I have seen an important case of inco-ordination following influenza, which closely resembles in some respects, the two already noted. In other words, it is a case of inco-ordination of all four extremities, with impairment of sensibility and other symptoms pointing to chronic neuritis, which, in this case, is probably associated with myelitis.

The patient is a man in middle life and of previously excellent health, who was attacked in January, 1890, during the height of the epidemic, with a severe and typical influenza. He never recovered his strength, and after the subsidence of the early symptoms he began to suffer from a severe epigastric pain of the character of the "girdle sensation," which followed him for a year. He dragged himself about and tried to work, but the weakness of the legs gradually passed over into the condition that now exists, namely, one of inco-ordination so great that he can walk but a few steps alone. There has not been much paræsthesia, but a high degree of impairment of sensibility is now present in the feet and legs, passing gradually away toward the upper part of the thigh. The knee-jerk is absent. The hands are somewhat ataxic, though he considers them practically well. There is a slight lack of control over the bladder. There has been at no time other symptoms characteristic of locomotor ataxia, such as pains or pupillary changes, and it is important to note that the disease has of late shown some tendency toward improvement.

Although these symptoms would point strongly to an involvement of the spinal cord, yet there are facts which render it

possible to believe that even such long-standing, chronic, and progressive affections as this may be related pathologically to disease of the peripheral nerves alone.—*Bost. Med. and Surg. Journ.*, Oct. 27, 1892.

**Coats (J.) on a Case of Acute Pneumonia and Leptomenigitis (Capsule-Cocci in Membranes).**—At a meeting of the Glasgow Medico-Chirurgical Society, Coats reported the following case:

J. A., thirty-five, died after an attack of acute pneumonia characterized by violent delirium. At the post-mortem there was found, besides the pulmonary change, a remarkable condition of the brain, of which the following is Dr. Coats' account:

"The longitudinal sinus presents several white thrombi. These are seen chiefly at the orifices of the veins, where they pour into the calibre of the sinus. In removing the brain and cutting through the veins, it is seen that the thrombosis does not extend far into them. It is the veins near the summit of the head which are affected.

"There is a nearly universal leptomenigitis, in the form of a yellow exudation. It is very obvious over the convexity, where it can often be seen following the veins in the form of yellow streaks on either side of them. At the base it is rather less abundant. It extends to both surfaces of the cerebellum. In the great transverse fissure the membranes are thickened by the infiltration of yellow exudation, but this does not extend to the front parts of the choroid plexus, and there is no yellow exudation in the ventricles.

"On microscopic examination of the exudation in the membranes, it is found to teem with cocci, which are typically capsule-cocci. By staining with watery solution of gentian-violet the capsule is very well seen. Sometimes the capsule alone is visible, the stain not having penetrated to the coccus, but in others the microbe itself is seen deeply stained.

"In the lung there are also capsule-cocci, but other forms of microbes are numerous, perhaps more numerous."

Specimens of those microbes were shown under the microscope, and in them the capsule could be distinctly recognized.—*Glasgow Med. Journ.*, Oct., 1892.

**Bewley (H. T.) on Chronic Tubercular Spinal Meningitis.**—Bewley showed before the Pathological Section of the Royal Academy in Ireland a spinal cord from a case of chronic internal tubercular

pachymeningitis. The disease lasted four years, causing complete loss of motion and partial loss of sensation in the legs. At first there had been marked inco-ordination with increased reflexes, but afterwards the reflexes culminated in permanent rigidity. Four years after the paralysis showed itself, the spine, became curved, the tenth dorsal spine becoming prominent. This singular curvature became rather more marked. Finally he died of tubercular meningitis. At the post-mortem examination it was found that the external surface of the dura mater was healthy; the internal surface was thickened. This thickening was most marked in the lower dorsal region, where there was about one sixth of an inch of tough, whitish tissue growing from the dura and attached to the arachnoid and pia mater. This tissue thinned off gradually above and below. On microscopical examination this tissue was seen to consist of granulation tissue containing giant cells, and tubercle bacilli, and in many places had become caseous. This tissue compressed the cord in the lower dorsal region. The cord showed ascending and descending degenerations above and below this point. The ninth, tenth, and eleventh dorsal vertebræ were carious, and there was cerebral tubercular meningitis. The disease had started in the internal surface of the dura mater, and the bone disease was secondary. That this was the course of the case is shown by the following facts:—(1) The external surface of the dura was healthy, the internal diseased. (2) The spinal disease did not show itself till three years after the paraplegia had become complete.—*Dublin Med. Fourn.*, Oct., 1892.

**Burt (S.S.) on Cheyne-Stokes' Respiration.**—In answer to a request for information on this topic, Burt writes as follows: There are no abnormal pulmonary physical signs associated with these respiratory phenomena. Such paroxysms, however, are not entirely confined to fatty degeneration of the heart, but occur in varying degrees of intensity with many cardiac affections and through periods of considerable duration. Still, they are especially significant of mural decay when the pulse slackens, in these attacks, with the ascending rhythm and increases in frequency during the suspension of respiration. The primary cause of Cheyne-Stokes breathing seems to be a weakness of the

heart muscle, in whatever manner produced; the secondary cause is located by some observers at the respiratory centre, resulting from the lack of stimulus in the failing circulation.

Respiration of this description has been noted in apoplexy, in sunstroke, in uræmia, in pericarditis, in peritonitis, in tumor of the brain, and in tuberculous meningitis. Consequently, this rhythmic agitation of the breathing is not, in the light of present information, a disease, but rather a symptom which depends upon a number of conditions that can seriously disturb the natural functions of the respiratory centre. And, in view of this, the remedy for the paroxysm is, in the first place, the treatment of the organic disease upon which it happens to depend; and, in the second place, the indications are to stimulate the centres of respiration by the administration of such agents as the sulphate of strychnine hypodermatically.—*Post-Graduate*, Oct., 1892.

**Handford on Hyperplastic Phlebitis.** At a recent meeting of the London Clinical Society Dr. Handford described the case of a man, æt. thirty, with intermittent albuminuria, cardiac hypertrophy, high vascular tension, general dilatation of the superficial venules, obliterative endo-arteritis and phlebitis, the latter nearly occluding the saphena and other large veins. The patient was a spare, dark man, showing signs of degeneration in his grayish hair, and an arcus senilis in each eye. He suffered much from migraine. He had been failing for two years and lost a stone in weight. He denied having had gonorrhœa or syphilis, and there were no signs of the latter. He complained of pain in the left loin. The apex beat of the heart was heaving, and the first and second was distinctly reduplicated. The radials were thickened and the tension was very high (sphygmogram). Both internal saphena veins stood out very prominently, and to the touch resembled tendons. There were no adhesions, and the veins could be rolled quite freely under the finger, but could not be flattened. In the horizontal position it was not possible to detect any flow of blood along the lower third of the main trunk on either side; but with the patient standing there appeared to be a slight movement of blood in them. A similar condition affected the external saphena veins, most of the branches of the internal saphenas, the radial ulnar, and cephalic veins. There was no history

of preceding thrombosis, or of œdema. Under the use of iodide of potassium and mercury the vascular tension fell to normal, and the induration of the veins greatly diminished, but did not disappear, while the circulation through them became much more free. The albuminuria persisted in the intermittent form.—*Eng. Med. Press*, Nov. 16, 1892.

**Infantile Respiratory Spasm.**—In a paper recently read before the Edinburgh Medico-Chirurgical Society Dr. John Thomson gave a short account of five cases that had come under his observation in which this curious and interesting condition had existed. It is also known as congenital laryngeal stridor, or infantile laryngeal spasm, and Dr. Gee has described a similar, although somewhat different, condition under the term "respiratory croaking." Of Dr. Thomson's five cases, three were boys and two were girls, whereas in all previously recorded instances where the sex is mentioned it seems to have been confined to girls, and the condition is often said to occur only in female children. As regards family history and general health, there was nothing of very great significance, except that in four of the cases more or less indigestion was present. In none of the patients was rickets apparent when the children were first seen, but it appeared later in those longest observed. There was no sign of congenital syphilis in any of the cases, and intellectual development seemed perfectly good. The onset of the stridor was noticed in three instances immediately after birth, but in one infant it was not observed until a week, and in the other a fortnight later. As regards the course of the malady, Dr. Thomson says that in severe cases the stridor goes on increasing in loudness during the first two or three months and then tends to subside spontaneously, and as improvement goes on the intervals become longer and the sound less loud, that accompanying inspiration, the crowing sound disappearing first, while the croaking may still be present at times. After the stridor has ceased to be heard under ordinary conditions it may reappear if the child is specially excited or angry; when the stridor is present inspiration begins with a croaking noise and ends in a high-pitched crow. When the breathing is quiet the latter does not occur. Expiration is accompanied by a short croak when the stridor is loud, but at other times it is

noiseless. As regards other symptoms, the indrawing of the chest wall and the episternal notch were well marked in four of the cases, but the *alæ nasi* did not move with respiration, and there was a striking absence of distress or cyanosis. Variations in the intensity of the sounds were not uncommon, and there were occasional intermissions, even when the condition was most constant and severe. The sounds were notably intensified by mental perturbation, more so, apparently, when the child was excited and apprehensive than when actually crying. Sleep seems to have no constant effect on the condition, and it does not cease when the tongue is depressed, nor even when the nostrils are closed, and when the child is taking the breast there is still sufficient air entering the nostrils to cause loud stridor. The effect of the ailment on the general health is not great, and the most effective treatment apparently is by regulation of the diet and other general precautions. Dr. Thomson regards the condition as due to spasmodic muscular contraction, the cause of this being some central disturbance of function, and he considers it closely analogous in nature and etiology to ordinary speech stammering, both being the result of defect in the proper co-ordinating mechanism.—*Ed. Lon. Lanc.*, Nov. 13, 1892.

**Biggs (H.M.) on Sudden Death from Impaction of Meat in the Larynx.**—At a recent meeting of the N.Y. Pathological Society, Biggs presented a larynx removed from a man who had died very suddenly, and his object in presenting it was to give greater prominence to a not uncommon cause of sudden death, namely, the lodgement of foreign bodies in the larynx. This man, while sitting in a restaurant eating soup, was observed to cough suddenly and to have a slight convulsion, and in a moment he was dead. After hearing this history, and before making the post-mortem examination, the speaker had expressed the opinion, based on a dozen or more similar cases, that death in this case was due to suffocation from the presence of a foreign body in the larynx. An important point in the history is the occurrence of a slight convulsion. At the autopsy a very large piece of meat was found so situated as to absolutely occlude the larynx. Death certainly does not take place in these cases from suffocation simply, but whether or not it was due to a reflex inhibition of the

heart's action he could not say. He had seen quite a variety of foreign bodies in the air-passages; thus, in one case a collar-button formed a complete ball-valve; in another a screw was found; in a third a toy balloon had been drawn into the trachea, and was inflated with each inspiration; in still another, a bronchial gland had caused suffocation by discharging its contents into the trachea.—*N. Y. Med. Rec.*, Nov. 19, 1892.

**Intro-Thoracic Auscultation.**—This is a new procedure suggested by Benjamin Ward Richardson. He has found that when an œsophageal tube is introduced into the stomach and the open end attached to a stethoscope, sounds from the stomach, heart, and great vessels can be heard and studied. What he found is best described in his own words:

He says: "I could hear soft friction of the tube against the walls of the œsophagus, and was made quite sure that the friction was uniform throughout, and that there was no special constriction or induration in any portion of the tube. When I passed the tube into the cavity of the stomach itself I obtained a sound new to me, like a gentle seething, as of air or gas agitated in a thickish fluid, and at times a gurgling sound of gas, with another sound probably due to muscular contraction of the stomach itself. . . . I withdrew the tube until the opening on the left side came in contact with that portion of the œsophagus that lies in immediate proximity with the heart. By previous auscultation of the heart over the thoracic wall I had failed to detect clearly the two cardiac sounds owing to the feebleness of the cardiac action, but now both sounds were as distinct as they would have been from a normal heart. They were not, however, the same precisely as the sounds we hear through the thoracic wall; they were duller in character, as if they wanted the resonance which is probably produced by the pleura stretched over the thoracic cavity. At the same time they were loud and were singularly distinct. By moving the tube gently up and down I could get the second sound separately from the first, and *vice versa*; but when I had the opening of the tube midway so as to compass both sounds there was not so much difference between the first and second sound as is common to that distinguishable in ordinary auscultation. I expected that on withdrawing

the tube farther out of the œsophagus it would be possible to hear a loud sibilant or vesicular murmur in respiration. In this I was disappointed to a certain extent. It was impossible to catch a murmur, even on a deep inspiration, so distinct as the murmur heard from the chest-wall outside."

Dr. Richardson hopes, by intra-thoracic auscultation, first, to learn about the condition of the stomach. The healthy organ will give its own peculiar sounds; in cancer or other disease these will be modified. Pulsating abdominal tumors can also be heard. Second, the heart-sounds can be studied from another point of view acoustically. Third, thoracic aneurisms can be heard, and, finally, slight strictures of the œsophagus can be recognized. Possibly, pulmonary sound can be studied also. The fact is recognized that in some sensitive patients the operation of introducing the tube is impossible and that in others it is dangerous.—*Ed. N. Y. Med. Rec.*, Nov. 26, 1892.

**Smith (H.) on Laryngeal Paralysis—A Sequel of Measles.**—In an epidemic of measles at this place, Dharmasala, every case of which was mild, paralysis of the intrinsic muscles of the larynx occurred as a sequel in three cases. The cases were mild, and had no respiratory complications or sequels except the laryngeal paralysis. The paralysis set in within a few days after the subsidence of the fever. The patient complained of no inconvenience except the loss of phonation. On laryngoscopic examination there was no congestion or inflammation to account for the matter. The rima glottidis remained midway between extension and contraction. Slight passive movements of the cords were visible on forcible respiration. The first case lasted about ten days (without any treatment); the second and third cases lasted about six days, treated with strychnine.

The condition is interesting as a rare sequel of measles, somewhat resembling the paralysis of diphtheria.—*Brit. Med. Jour.*, Nov. 19, 1892.

**Sutton (B.) on the Hydatids of the Omentum.**—The patient operated on was a woman, aged thirty-one, the mother of several children. After her last confinement she noticed irregular swellings in the lower part of her belly; they did not cause much pain or inconvenience, but as they increased in size she consulted her doctor, who examined the pelvis and found Doug-

las's fossa filled with a large soft growth ; he advised her to consult Mr. Sutton, who confessed, however, that he was as much puzzled over her case as her doctor had been. At a consultation with his colleagues at the hospital, Mr. Sutton said no definite diagnosis could be arrived at, and in view of the uncertainty of the case it was decided to give the patient the benefit of an exploratory operation. On opening the abdomen he at once recognized that the tumors were hydatid cysts, varying in size from that of a haricot to that of a foetal head. The tumor in Douglas's pouch was a collection of three large cysts. Mr. Sutton pointed out that two courses were open to him : 1, to close the abdomen ; 2, to shell out the larger cysts. He chose the latter, and succeeded in enucleating a dozen of the larger cysts. The abdomen was then flushed with hot water and a large drainage-tube inserted. The operator subsequently remarked that he had adopted a similar plan in another case of omental hydatids, and that suppuration had occurred in the peritoneal cavity which killed the smaller cysts, the patient making an admirable recovery, and it was with this case in mind that he ventured to follow out the same treatment in the one under consideration. It seems, he added, that the inflammation, when the peritoneum is thickened as it was in the present patient, is not attended with such disastrous consequences as when it supervenes in the healthy serous membrane. Mr. Sutton said that before he opened the abdomen he thought there might be two ovarian tumors with secondary deposits in the peritoneum.—*Eng. Med. Press*, Sept. 28, 1892.

#### Musser (J. H.) on Tuberculous Ulcers of the Stomach.—Conclusions :

1. Tuberculous ulceration of the stomach is rare.
2. It occurs more frequently in children.
3. It is never primary.
4. Gastric infection is probably due to the voluntary or involuntary swallowing of sputum.
5. The presence of the bacillus tuberculosis is the only positive proof of the nature of the ulceration.
6. The anatomical peculiarities of this form of ulceration include the following :—
  - a. The seat of the ulcer is in the lesser curvature, although it may be found in any position.
  - b. More than one ulcer is usually seen.

c. The ulcers are large and irregular.

d. Miliary tubercles on the floor of the ulcer in the submucous coat are seen.

e. The ulcers are near vessels and the results of vascular ulceration are found.

f. Small caseating masses are seen in the ulcer or at a portion of the periphery. Similar collections are found in the territory adjacent to the ulcer, in the submucous coat.

g. The peritoneum is studded with miliary tubercle very often.

h. Neighboring lymphatics are often involved.

7. In the large majority of cases there were no symptoms during life.

8. Sudden hemorrhage is a frequent symptom and cause of death ; it has been particularly noted in children.

9. Epigastric pain and vomiting may occur.

10. The presence of gastric symptoms of this kind, occurring in the course of tuberculosis, is significant of possible ulceration.

11. In view of the fact that the swallowing of sputum is possibly dangerous, expectoration should be insisted upon in adults and its method taught to children.—*Eng. Med. Press*, Oct. 19, 1892.

**Lane (Arbuthnot) on a Case of Extensive Nævus of the Peritoneum, the Greater Part of Which He had Removed.**—The boy, æt. seven, was said to have had a tumor in the right side of the abdomen at birth, which increased rapidly with the growth of the child, till it assumed a considerable size. It fluctuated in parts, was apparently situated beneath the abdominal muscles, and was not free in the abdominal cavity. The skin covering it was normal. The bulk could not be affected by pressure, nor could it be displaced from its position in the right side of the abdomen. As it extended to the umbilicus it was impossible to determine the condition of the kidney or its relationship to the tumor. Mr. Lane cut down on the tumor, which proved to be nœvoid, containing large cysts filled with fluid blood. It extended backwards over the peritoneum, to which it was inseparably connected, and from which it apparently grew over the surface of the kidney and beneath the diaphragm over the liver, and in front to the middle line, at which limits it terminated gradually by becoming thin. It was thickest about the centre. It infiltrated somewhat the abdominal muscles which

covered it. The peritoneal cavity was opened, when its inner aspect was seen to be livid, and to present rounded masses, some of which were partly pedunculated. All of the growth which could be got at was removed, only a thin layer being left on the outer surface of the peritoneum. The child became entirely collapsed from the considerable loss of blood consequent upon this part of the operation, its pulse becoming extremely feeble and about 170 a minute. The collapse was at once removed by the introduction into the circulation of a pint and a quarter of normal saline solution. The lad recovered without a bad symptom, and now presents no sign of any recurrence of the tumor. The growth proved to be nævoid in structure.—*Trans. London Clin. Soc.—Eng. Med. Press*, Oct. 19, 1892.

**Rolleston on Fat Necrosis, Associated with Disease of the Pancreas.**—At a recent meeting of the London Pathological Society, Rolleston showed specimens of fat necrosis in the fat of the mesentery, great omentum, and in the appendices epiploicæ. The areas of necrosed fat were of an opaque white color, in size they varied from a pin's head to half a split pea, in shape they were round or oval. They were not raised above the surface and were not surrounded by an area of congestion. The contents of these opaque spots gave the reactions of fat. Microscopically the areas were composed of fat cells distended with granular material which was in places crystalline; the nuclei of the cells did not stain; these areas were immediately surrounded by normal fat cells, some of these areas of fat necrosis showed some small cell proliferation at their margin, but usually on one side only and near a small vessel. The specimens were taken from two cases under Dr. Cavafy's care in St. George's Hospital. The first case was chronic, the second very acute. Case 1: A woman, aged 50, received a blow on the abdomen, which was followed at once by pain and the next day by severe vomiting, inaction of the bowels, and collapse simulating intestinal obstruction. The vomiting continued and slight diarrhœa came on. An abscess developed in the right hypochondrium two and a half weeks before death, which took place 80 days after the injury. *Post-mortem*.—An abscess on the head of the pancreas and fat necrosis in the subperitoneal cavity. The

liver was in a condition of fatty infiltration, but there was no necrosis of the fat globules. Case 2: Man aged thirty years. One year and a half previously a cart passed over his abdomen. Several attacks of abdominal pain since; after dinner sudden abdominal pain, vomiting and constipation, with collapse. Laparotomy; death thirty-six hours afterwards. *Post-mortem*.—Hemorrhage around the pancreas; the source of the hemorrhage was not manifest. Disseminated fat necrosis in the abdomen. There was no evidence of pancreatitis. In neither case was there any fat necrosis in the fat of their thighs or abdominal wall. Dr. Rolleston said there were two theories: 1. That the fat necrosis was a primary change in the fat of the fat cells, which set up a surrounding inflammation, which, becoming confluent around the pancreas, produced changes and often alternately necrosis of that organ (Langerhaus). 2. That pancreatitis, hemorrhagic, suppurative or gangrenous, and pancreatic hemorrhage was the primary lesion, which by extension produced fat necrosis the primary lesion, which by extension produced fat necrosis (Fitz). He said that neither of these hypotheses was very satisfactory, and he thought that the occurrence of fat necrosis might be explained as a tropic lesion, the result of the morbid process spreading from the pancreas to the solar plexus. The view was supported by the clinical symptoms being those of vomiting, collapse, and constipation, great disturbance of the sympathetic, and the distribution of the fat necrosis would fit in with this view.—*Brit. Med. Jour.*, Oct. 22, 1892.

**Colgan (J. F.) on Gastric Ulcer in a Child Two and a Half Years Old.**

—On May 26, 1892, at 8 P. M., I was called to attend L. H., two and a half years old, who was said to be suffering with spasms. The temperature was 106°; the pulse about 150, rather full and tense; the breathing was stertorous; and all of the voluntary muscles of the body were in active contraction. There were also involuntary evacuations from the bladder and rectum.

The history I obtained from the parents were as follows: The child had been perfectly well until 11 o'clock that morning, when she came in from the street, saying she did not feel well. There was no vomiting and no complaint of pain. The mother had examined the stools for

worms, but had failed to find any. The first dentition had been passed. The child did not eat anything, and lay on a lounge until I was called. The convulsions were readily controlled, and consciousness, which had been lost from the beginning of the attack, was beginning to return when another convulsion occurred, apparently limited to the diaphragm, and terminating fatally at 12 o'clock.

At the autopsy I was greatly surprised to find a perforating ulcer of the stomach. The high temperature had led me to suspect either beginning scarlatina or meningitis. Against meningitis was the entire absence of pain of any kind; there was no headache, no fretfulness—in fact, no symptom indicative of intra-cranial disease. Against scarlatina was the absence of eruption and sore-throat.

Convulsions in childhood are due to many causes, but in this case I could find nothing to account for them until the autopsy disclosed the existence of a gastric ulcer.—*Phil. Med. News*, Oct. 1, 1892.

**Beadles (C. F.) on Volvulus of Sigmoid Flexure Without Symptoms.**—A man nearly seventy-two years of age, who had been an inmate of an asylum for two years and a half, but whose mind has been affected for thirty-two years, died somewhat suddenly under the following circumstances. He had attacks of excitement, with hallucinations of a suicidal tendency. Since admission here he had been in a more or less feeble state of health, with an aortic systolic bruit. He had been quiet for several months past, and was able to get about and do a little work. At 10 A. M. on Oct. 17th I was called to see him, as he complained of pain in the left hypochondriac region. This had only just come on; but beyond telling me of this pain he complained of nothing else, and there were no other symptoms. On examining the heart the sounds were irregular, and there was a murmur present; pulse fairly good. As his bowels had not been opened for three days, I ordered a dose of castor oil and had him put to bed. The bowels not acting, he had a simple enema a few hours later, which was only partly retained, but it brought away some fecal matter. Towards evening the abdomen became distended and he died at 7.30 the same day. There had been no vomiting and comparatively little pain.

Post-mortem the brain was such as is common in the insane, with thickening of the membrane and an excess of fluid. The heart presented hypertrophy of the left ventricle, with mitral stenosis; there was slight atheroma of the aorta above the semilunar valves; the pericardium contained about two ounces of clear, serous fluid, with no adhesions. There was no other point to note beyond the condition of the intestines. On opening the abdomen there was at once seen a coil of large intestine, which was enormously distended and of a black color. It completely hid from view all the other abdominal viscera, and had its fixed point at the brim of the pelvis on the left side, with its loop upwards. This was found to be the sigmoid flexure; it was twice twisted round itself at the fixed spot, and could be undone with ease. On removing this portion of the bowel it was found empty with the exception of a little blackish fluid, but the whole of the sigmoid flexure was of a black color both externally and internally. The rectum and the lower part of the descending colon were empty; the rest of the intestine was slightly inflated. No stricture existed at the seat of the twist. The strangulation must have existed over twenty-four hours, and yet there was an entire absence of symptoms beyond some pain during the last ten hours. I mention this case as an instance of the difficulty in diagnosis so often associated with insanity.—*Lond. Lan.*, Nov. 19, 1892.

**Ratcliffe and Wilson on the Venous Anastomoses in Relation to the Relief and Cure of Ascites in Cirrhosis of the Liver.**—A paper with the above title was read at the last meeting of the British Medical Association as a contribution to the discussion of the treatment of ascites. The writers showed specimens of seventeen cases in which the anastomoses between the portal and systemic venous systems had been injected and dissected. The result showed that those channels in the region of the stomach, namely, through the coronary vein to the submucous œsophageal plexus and into the azygos and intercostals, or through the coron vasa brevia branches of the splenic vein to the pericesophageal plexus and so into the left inferior phrenic vein to the left suprarenal vein, were by far the most constantly dilated, and, when so, afforded by far the greatest amount of relief to the

obstructed portal blood. The hemorrhoidal route through the branches of the inferior mesenteric vein to the internal iliac vein or spermatics, was seldom much dilated, and was not of such importance as a means of relief as was generally supposed.

They differed from Dr. Bristowe's assertion that cases of ascites which had been relieved were not in all cases due to shunting the portal blood through some channel into the systematic veins, for in several of such cases which had had ascites cured, they had always found large channels on injection.

They pointed out that the clinical difference between the submucous and peri-oesophageal routes before mentioned, was that in the former death was liable to occur from hæmatemesis, while in the latter this danger did not exist. They pointed out that the formation of these channels was the means of cure or relief of, and therefore were of opinion that the treatment of ascites in cirrhosis was early and frequent tapping together with rest, in order to allow these channels to be developed. They also agreed with Professor von Schrötter, of Vienna, as to the great importance of the tapping being followed by elastic support to the lax abdominal wall, for without this the pressure in the portal vein would be insufficient to force the blood through these channels, and consequently ascites would again rapidly develop.—*Brit. Med. Journ.*, Nov. 19, 1892.

**Enteroptosis.**—In an article in a recent number of the *Munch. Med. Wochensch.*, Dr. Kretz, lately assistant in the University Klinik, Würzburg, gives an account of this but little understood condition. It has been described by Virchow and others, it is true, but it has been looked upon as a curious pathological condition rather than one of clinical interest. By the term is understood a descent of almost all the contents of the abdominal cavity, and it was Glenard, of Vichy, who first drew attention to the condition as the prime cause of many cases of nervous dyspepsia. According to him, many diseases designated as neurasthenia, neuroses, a neuropathic condition, dyspepsia, gastric giddiness proceeded from the changed conditions of the equilibrium of the abdominal viscera. The hepatic flexure of the colon sinks, then the transverse, especially the right half, and the stomach. As is known, the

transverse colon is fixed in a fold of omentum to the greater curvature, and with descent with the right flexure a flexion takes place—an enterostenosis. The part of the colon beyond the stenosis contracts, its walls become thicker, the "corde-colique transverse" can be felt running about two cm. above the umbilicus as a cord scarcely one cm. thick. By further descent of the small intestine a stenosis of the duodenum arises; above this a dilatation takes place which reacts on the stomach. Descent of both liver and spleen may also take place. Glenard has repeatedly observed descent of the kidneys as well as a consequence of this condition, and he believes there is no nephroptosis without enteroptosis. The general descent may be completed by prolapsus of the uterus.

The diagnosis is easy. The patient stands in front of the medical attendant, who places both hands on the hypogastrium and makes pressure upwards and inwards. If the pressure relieves the symptoms, and if they return when the pressure is taken off, the case is one of enteroptosis.—*Corres. Eng. Med. Press*, Nov. 2, 1892.

**Grimsdale (T. B.) on Congenital Absence of the Peritoneum.**—Grimsdale recently exhibited an interesting case of this nature before the Liverpool Medical Society. The patient was a young woman, married about eighteen months, no pregnancy, menses practically normal. From her marriage she had suffered more or less pain in the left iliac region, and a few weeks before coming under observation she fell on the stairs, striking the abdomen. Acute pain was felt at the time, but notwithstanding this she went out with her husband. Whilst out she was suddenly seized with such pain that she had to be taken home and put to bed. A short time after this she was admitted into the Hospital for Women under Dr. Grimsdale. From the time of her admission there was no pyrexia, nor was there any history of fever, but a cystic swelling as large as a foetal head was felt in the left iliac region. The patient had also slight exophthalmos and a small goitre. The abdomen was eventually opened, but no trace of peritoneum could be discovered. The intestines were, as far as could be observed, universally adherent, and had to be separated in the direction of the cyst. This was finally reached, and about a pint of clear serous fluid evacuated. One or two



smaller collections were also emptied, and all washed out and drained. The patient made an uninterrupted recovery. He believed the case to be one of congenital absence of general peritoneum, similar to some that had been described.—*Eng. Med. Press*, Nov. 16, 1892.

**Bryant (J. D.) on Vesical Stone Formed Around a Catheter.**—At a recent meeting of the N. Y. Pathological Society, Bryant presented several pieces of stone, with a piece of rubber catheter within, removed from a young man, about sixteen years of age. The patient had been brought to him by the family physician, who stated that about three years before, while catheterizing the bladder for some reason which he did not name, a portion of the gum elastic catheter had broken off and remained. The case illustrated the importance of removing any foreign body from within the bladder as soon as one knew it had been left there.

Dr. Shrady referred in that connection to the following case: A man, sixty-five years of age, entered the hospital with a broken catheter in the bladder. The family physician had passed a rubber catheter, broke it off in the urethra, and while he had gone home for an instrument with which to remove it, a second physician was called, who attempted catheterization and pushed the fragment on into the bladder. Dr. Shrady introduced a lithotrite, fished for the catheter, at the same time trying to avoid injury to the mucous membrane. Finally he grasped the catheter a distance from the end, and while attempting to withdraw it it doubled upon itself, and, with the beak of the lithotrite, became locked in the prostatic urethra. This was an unlooked-for complication, for he could neither push the instrument back nor draw it forward. The lithotrite was then made to bite its way through the part within its jaws and was easily withdrawn. He finally succeeded, by means of the lithotrite, in removing the different fragments piecemeal.—*N. Y. Med. Rec.*, Oct. 29, 1892.

**Turner (D.) on Electro-Diagnosis by Means of the Urine.**—It is found in normal urine that the resistance to the passage of an electric current varies inversely as the specific gravity.

In diseased conditions there are certain exceptions to this rule.—“That the resistance varies inversely with the specific gravity,” which can be arranged accord-

ingly as they occur in acute or chronic diseases. Excluding acute infectious diseases and local surgical affections, the two most prominent exceptions are,—amongst the former, acute croupous pneumonia; amongst the latter, diabetes mellitus.

That the urine of a case of pneumonia should offer a higher electrical resistance than would be predicated from its specific gravity is easily understood, when the great diminution of the chlorides in the urine of a case of this disease is remembered; but the increased resistance of a diabetic urine affords a question of a more interesting nature. In this disease the specific gravity of the urine is high, and the electrical resistance offered by it is also high, and sometimes very high. Thus the specific gravity may be considerably above 1030, and the resistance at the same time as much as 150 ohms, while the resistance of an ordinary urine of a specific gravity of 1030 would probably be below 40 ohms.

Upon what does this increased resistance depend? on a diminution in the salts, or on the presence of the sugar? Almost wholly on the former. The tables Nos. 2 and 4 of experiments with artificial solutions show us that a 1 per. cent. solution of sodium chloride has a resistance of 59.5 ohms, and that the addition of 10 per cent. of grape sugar only raises the resistance to 68 ohms; a 2 per cent. solution of sodium chloride has a resistance of 29.25 ohms, the addition of 20 per cent. of sugar raises it to 51 ohms, and of 30 per cent. of sugar to 63.75 ohms. With smaller percentages of sugar there may be scarcely any effect.

It cannot, therefore, be doubted that the sugar, probably hindering diffusion by its viscosity, does to a slight extent raise the resistance of a saline solution. (It will lower the resistance of distilled water when by itself.) But by far the greater part of the increased resistance of a diabetic urine is due to the relatively great diminution in the salts, and it is to the merit of the electrical testing that this is brought so prominently forward. It will be found further that this resistance usually diminishes with the amount of sugar passed, and that it may be utilized as a test of the patient's progress. Whenever we find a high specific gravity together with a high electrical resistance (above 80 ohms specific resistance), we may suspect the presence of sugar. The specific gravity is raised by

the sugar, and the resistance is increased by the diminution of the salts.

In acute and chronic Bright's disease the resistance is high, also usually in chronic bronchitis, phthisis, mitral disease, and anæmia, particularly pernicious anæmia. The effect of diet has to be considered. Copious draughts of water increase the resistance. Taking much salted food diminishes it, etc.—*Edin. Med. Four.*, Nov., 1892.

**Lydston (G. F.) on a Case Illustrative of the Constitutional and Hereditary Origin of Varicocele.**—A man, thirty-nine years old, of medium height, spare, and rather delicate, was referred to me for counsel regarding varicocele. I found that he had a double varicocele, the left side, as is usual in such cases, being much the larger of the two, although the right was also quite large. The veins of the entire abdomen were greatly enlarged and markedly varicose, the upper part of the abdomen presenting the peculiar arborescent appearance so frequently seen in cirrhosis of the liver. The veins of both extremities presented varices as severe and extensive as almost any that I have ever seen. Both testes were atrophied, the right especially so. On examination of the rectum I found the patient to be suffering from severe hemorrhoids. The family history of the patient is very interesting, he himself recognizing its important bearing upon his condition. His mother, whom he stated he favored very noticeably, had always been delicate and suffered from severe varices of the extremities. No other particulars could be obtained regarding her history, save that she died of what was pronounced to be "pernicious anæmia," a fact that in itself is quite suggestive. One of the patient's brothers is affected by what, from his description, I infer to be several *nævi* located upon the inner aspect of one thigh. These have developed within the past few years.—*Phil. Med. News*, Nov. 26, 1892.

**Bishop (L. F.) on Two Practical Suggestions in Analysis of Urine.**

—The preferable form of deposit glass consists of a cylindrical glass resembling that commonly used for taking specific gravity, but larger and constructed with a wider foot and a lip for pouring.

The bottom is slightly concave instead of the convex form that the maker naturally gives to such vessels unless warned not to.

The advantages of the cylindrical over the usual conical form are practical and important. The specific gravity can be taken without disturbing the sediment and the bulk of the sediment can be more easily estimated.

Every hospital interne falls into the habit of completing his analyses, except the microscopic work, and then doing that with greater or less care as indicated by the previous tests. With the conical form of glass this is attended with serious disadvantage, as the urine must be put into another vessel to find its specific gravity. Another disadvantage of conical glasses is that casts adhere to the sides in settling.

The best practical method for estimating the quantity of sugar in urine is by the fermentation of a specimen until the sugar is entirely destroyed, and then determining how much has been disposed of.

Take two four-ounce bottles of urine: cork one tightly; into the other drop one quarter of a cake of compressed yeast (Fleischmann's). Stand in a warm place until the glucose in the latter has been destroyed as shown by Fehling's test. The number of degrees of difference in specific gravity will equal approximately the number of grains of sugar to the ounce of urine.

The specimens might be weighed and the sugar estimated by a simple arithmetical calculation, but the use of the urinometer is really only a simpler method of weighing. The degree-grain ratio expressed above is found to be nearly correct (Roberts).

I have devised the following formula which can be used in the intervals between the estimations in well-marked cases of diabetes: Divide 880 by the number of ounces of urine passed in twenty-four. To the result add 1,000, and subtract the sum from the specific gravity of the urine. The result will be the number of grains of sugar to the ounce of urine.

The primary number, 880, may be for greater accuracy, altered to suit exactly individual cases as determined by experiment.

For example, suppose a patient to pass 100 ounces of a specific gravity of 1.030.  $\frac{880}{100} + 1,000 = 1,008.8$ .  $1,030 - 1,008.8 = 21.2$ . The patient has about 21 grains to the ounce. Now, if in this individual case the result was found to be too far from the truth, a suitable number would be substituted for 880, which, though the best coefficient for general use, yet is not so

good for particular cases as one that may be determined by experiment.—*N. Y. Med. Journ.*, Oct. 8, 1892.

**Tyson (J.) on Aceton and Diacetic Acid, their Detection and Clinical Significance When Found in Urine.**

—The first part of the article is occupied with an enumeration and description of the various chemical tests for these two substances.

Concerning their clinical significance Tyson adds:

Acetonuria seems to be a result of continued high temperature, or at least accompanies diseases attended with such temperature, and a lowering of temperature is followed by a fall in the quantity of aceton, while a redevelopment of high temperature is followed by an increase in aceton. Such acetonuria is known as *febrile*.

Acetonuria often accompanies diabetes, constituting *diabetic acetonuria*; but is not necessarily associated with it or with glycosuria, and while the development of acetonuria in diabetes is sometimes accompanied by very unpleasant symptoms, as headache, loss of appetite, and deranged digestion, all of short duration, it is otherwise of little significance except as a possible precursor of the diaceturia which often succeeds it in this disease.

Among other diseases with which aceton has been found associated are certain forms of carcinoma, which have not yet led to inanition; cerebral psychoses accompanied by mental excitement and derangements of digestion.

Very rarely aceton itself is responsible for a set of symptoms in which restlessness, excitement, and delirium are the most conspicuous, constituting a sort of auto-intoxication, the symptoms of which pass away entirely with the disappearance of the aceton.

On the other hand, what is commonly known as diabetic coma, according to Von Jaksch, is the result, not of aceton in the blood, but of *diacetic acid*, although it is often preceded by a long-continued acetonuria. It is commonly observed in cases of far-advanced diabetes. There is added to the usual feeling of weakness and depression, drowsiness, which may deepen into coma or pass away, the diaceturia continuing. Sometimes these symptoms are preceded by excruciating muscular pain. As a rule there is no relation between the amount of sugar and diacetic acid elimin-

ated, although a sudden diminution of glycosuria is sometimes followed by the appearance of a large amount of diacetic acid, by coma and death.

There is also a *febrile diaceturia* which accompanies febrile diseases, among which are the acute exanthemata, pericarditis, pleuritis, perityphlitis, typhoid fever, miliary tuberculosis, tubercular phthisis, and pneumonia. It is to be remembered, however, that symptoms of diabetic coma may occur without either acetonuria or diaceturia. Von Jaksch proposes to do away with the term "diabetic coma" and substitute "coma diaceticum" for all of those cases of coma, from whatever remote cause, accompanied by diaceturia.

Finally, there appears also to be an *idiopathic diacetemia* or auto-intoxication, by diacetic acid, unattended by other grave disease such as pneumonia or diabetes, and manifested by vomiting, dyspnoea and jactitation, which soon terminates in coma or death. This condition, very grave, but rare in adults, is said by Von Jaksch to be much more frequent in children and correspondingly less serious. In such cases the child feels weak, has a thickly-coated tongue, often slight conjunctival catarrh, there is sometimes vomiting, usually constipation, and very little or no fever. In two or three days all of these symptoms, together with the diaceturia, disappear. In other cases nervous symptoms are more marked. Von Jaksch believes that all of these, as well as a certain number of other convulsive attacks in children, are the result of auto-intoxication with diacetic acid.—*Univers. Med. Mag.*, Oct., 1892.

**Ferguson (F.) on the Diagnosis of Tumors of the Bladder by Microscopical Examination.**—Ferguson recently presented at a meeting of the N. Y. Pathological Society a series of specimens illustrating the different varieties of tumors of the bladder, their situation and general characteristics, and dwelt particularly upon the important aid in diagnosis rendered by microscopical examinations. Exclusive of the cystoscope, he believed that the best method of making a diagnosis of tumors of the bladder was by continuous microscopical examination of the urine. This method of diagnosis is of comparatively recent date. The method which he adopted consisted in collecting the entire quantity of urine voided during the twenty-four hours, and collecting the sediment from this by

filtration through cheese-cloth. Small fragments of tissue which are found in this sediment are hardened in alcohol, embedded in celloidin, and one or two hundred sections made and examined with a low power. If this preliminary examination reveals anything of importance, the sections are stained and examined with higher power. In some cases a sufficient number of fragments may be obtained from a small quantity of urine, and may not require to be examined for several days at a time. The present method of removing a small quantity of urine with a pipette and examining one or two slides is very unsatisfactory, but by making repeated examinations of a large number of sections of tissue, much more valuable information can be obtained, and the speaker thought a more general adoption of this mode of examination would soon greatly enlarge our knowledge of tumors of the bladder. By this method he had made the diagnosis on several occasions, and had had the satisfaction of having its accuracy confirmed by subsequent operation.

Tumors of the bladder had, up to quite recently, been considered to be comparatively infrequent, and this was chiefly owing to the fact that at post-mortem examinations the bladder is seldom subjected to the same careful examination as were the other parts of the body.—*N. Y. Med. Rec.*, Oct. 8, 1892.

**Thomas (J. D.) on Calculus in the Genito-Urinary Passages.**—The first case was one of long standing. The patient complained of urinary trouble for three or four years. It was suspected that he had a calculus in his bladder. Yet his bladder had been examined by very capable gentlemen several times, and they never were able to detect a calculus in it. I examined him three or four times, but could never detect anything in the bladder. In addition to bladder trouble he complained of his right side, and finally this trouble annoyed him more than anything else. Not being able to discover anything in the bladder, I suspected that it existed in the right kidney. At the urgent solicitation of the patient I cut down upon the right kidney about the end of June, and manipulated it thoroughly, but failed to discover any evidence of stone in the kidney. The wound healed finely, without any pus, in three or four weeks. The patient complained afterwards of trouble in his urinary apparatus. Dr. Martin sounded him with

a searcher and discovered a stone in the bladder, and the result was an extracted stone. The question arises whether manipulation dislodged it from the kidney pelvis or whether the calculus was in the bladder all this time. Dr. Banks, of New York, discovered a calculus in the bladder, though the patient had been examined three or four times by very able men in New York City, who had failed to discover it, and he claims if the calculus cannot be found the better plan is to put the patient in bed, and very often a stone can be discovered where it could not without this preparatory treatment. The peculiarity of this case, as well as the case following it, is that the patient should go around so long without the discovery of so large a stone. This stone weighs more than nineteen drachms.

The second case was sent to the South Side Hospital. He had been suffering for three years with urinary troubles, and in the meantime he had acquired a gonorrhœa. This patient was treated by six or seven physicians. He had had no control of the sphincter for a long time; about every half minute he would eject what urine was in the bladder. I expected from his statement that I would find a very tight stricture. I first passed in the searcher and found an oxalic acid calculus. It was removed on July 7th. The patient had been suffering for fifteen years, and it was never discovered until he came to the city. The reason for performing lithotomy instead of litolapaxy was the bladder was inflamed and contracted, and by this operation perfect drainage could be secured, the bladder get a long rest, and in that way recover. The first patient left the hospital in twenty-one days, while the second one expects to leave soon. Both have made a wonderful recovery. The second patient's temperature went up to 106° on the second day, then it gradually went down, and in four days was about normal, and remained so since. These cases went on for a long time; if they had been discovered earlier the calculi might have been removed without much trouble. This smaller one weighs a little more than six drachms. I could use the cystoscope and pass it all around his bladder, yet I failed to discover anything in the bladder with that, or by the use of a searcher, and it seems strange to me if it was in the bladder that it could not be found.—*Med. Standard*, Oct., 1892.

# GENERAL INDEX.

- Abdomen**, gunshot wounds of, 107  
penetrating gunshot wounds of, 145
- Abdominal surgery**, complications in, 113
- Abortion**, and premature labor, 217  
followed by pneumothorax, 182
- Habitual**, 259, 397  
New method of management in, 341  
Treatment of, 175, 339
- Abscess**, caused by phthisical cavity, 331  
Cerebral, 296  
Hepatic, 163  
Lachrymal, with fistula, 133  
Lumbar, in Pott's disease, 116  
Mastoid, breaking into digastric fossa, 343  
Retro-pharyngeal, in infants, 452  
Spinal, evacuated without drainage, 24  
Treatment of, 293  
tubercular, treatment of, 293
- Acetanilide poisoning**, 312
- Aceton** in urine, 575
- Acid**, carbolic, poisoning by, 123  
Chronic, in cysts, 68  
Diacetic, in urine, 575  
Hydrochloric, diagnostic value of, in gastric juice, 359  
Poisoning by, 25  
Hydrocyanic, poisoning by, 126  
Lactin, in cancer of tonsil, 557  
Osmic, in goitre, 110  
Oxalic, and acute rheumatism, 308  
Salicylic, in cystitis, 128
- Acne rosacea** and sycosis, 227
- Actea racemosa** in dysmenorrhœa, 209
- Actinomycosis**, 93  
Treatment of, 107
- Adenitis**, scarlatinal, 180
- Adenoids**, Gottstein's curette in, 223  
Gradle's forceps in, 223  
Naso-pharyngeal, 9
- Adenoma**, fibro-cystic, of breast nodule, 328  
of liver, 427
- Addison's disease**, 424
- After pains**, how to prevent, 218
- Air**, entrance of, into uterine veins, 219
- Albuminuria**, in relation to surgical operations, 46, 533  
not due to organic kidney disease, 380  
Varieties of, 463
- Alcoholism**, study of, 327  
Treatment of, 140
- Alkaloids**, mydriatic, 16, 152
- Amblyopia**, central toxic, 456  
toxic, 344
- Ammonium**, bromide, and anti-pyrine in epilepsy, 142
- Amputation**, conical stump after, 109  
in diabetes, 370
- Anæmia**, 370  
A new preparation of iron in, 268  
and mountain air, 406  
as cause of permanent heart lesion, 281  
Copper and arsenic in, 68  
Ozonized air in, 5  
Pernicious, antiseptic treatment of, 354, 499  
Eye affection in, 83  
Transfusion in, 371, 538
- Anæmic debility**, treatment of, 354
- Anæsthesia** by ethyl bromide, 203
- Anæsthetic collapse**, strychnine in, 493
- Anchylosis**, correction of hip-disease, 487
- Aneurism**, arterio-venous, 247  
cured by digital pressure, 461  
Double thoracic, 279  
False, of internal carotid, 39  
Innominate, 215  
leaking, ilio-femoral, 215  
of cavernous sinus, 247  
of internal carotid artery, 247  
of thoracic aorta, diagnosis of, 279, 280  
Traumatic aortic, 148
- Angina**, 526  
and cardiac pain, 39  
Prodromal symptoms of, 147  
Sparteine sulphate in, 548
- Añiline dyes**, in inoperable malignant neoplasms, 139
- Ankle-joint**, Lowenstein's method of opening, 295
- Anosmia**, 275
- Anthrax**, excision of pustule in, 67  
virus, influence on tuberculosis, 278
- Antifebrin**, causing prolonged sub-normal temperature, 27  
in premature labor, 142  
in scarlatina, 495  
Toxic effects of, 546
- Antimony** in skin disease, 323
- Antipyrin**, and ammonium bromide in epilepsy, 142  
in diabetes, 311  
in fever, 495  
in whooping-cough, 65, 66  
injections causing gangrene, 5  
Poisoning by, 313
- Antisepsis**, surgical, 333
- Antiseptic treatment** of pernicious anæmia, 354
- Antral disease**, electric light in, 239
- Antrum** of Highmore, bilateral empyema of, 224  
Suppuration in, 224
- Anus**, imperforate, 44
- Aortic**, aneurism, tracheal tugging in, 182  
disease, digitalis in, 157, 208  
regurgitation and digitalis, 429  
valve, diagnosis of disease of, 179
- Aortitis**, acute, 526
- Apioline**, proper use of, 408
- Apocynum**, cannabinum in dropsy, 312
- Appendicitis**, 332, 535  
perforating, pathognomic sign of, 287
- Arsenic**, in anæmia, 68
- Arteries**, atheromatous disease of, 428
- Arterio-sclerosis**, 428  
Nutritive troubles in, 293
- Arteritis**, general, in child, 315
- Artery**, coronary, abnormal origin of, 374  
syphilis, 178  
external iliac, ligature of, 215  
internal carotid, aneurism of, 247
- Asaprol**, 349
- Ascites**, curability of, 487  
Milky, 377, 470
- Asphyxia neonatorum**, new method of artificial respiration in, 343
- Asparagus**, effect of, on urine, 379
- Aspiration** from the patient's standpoint, 37
- Asthma**, hay, 161
- Astigmatism**, 402  
Diagnosis of, 402  
100 cases contrary to rule, 345
- Ataxia**, acute, after diarrhœa, 198
- Athetosis**, 296
- Atrophy** of brain hemisphere, 479
- Atropine**, causing erysipelatous eruption, 93  
in hæmoptysis, 67  
its use necessary with ophthalmometer, 403  
Poisoning by, 157  
poisoning without dilated pupils, 458
- Auditory**, canal, condylomata of, 106  
centre, localization of, 106
- Aural and nasal disease**, relations of, 455
- Auricle**, displaced, 532  
Epithelioma of, 404
- Auscultation**, intrathoracic, 568
- Auscultatory percussion**, stethoscope for, 407
- Avena**, sativa, 14
- Bacillus**, coli communis, 177  
Diphtheritic, as related to pseudo-diphtheritic bacillus, 120  
Pus-producing, from earth, 366
- Bacteria**, in bottled waters, 516  
in wounds and skin stitches, 266

- Bacterial poisons and immunity, 149  
 Bald heads, 77  
 Basedow's disease, extirpation of thyroid gland in, 260  
   Surgical treatment of, 196  
 Belladonna as prophylactic in scarlatina, 18  
 Benzol, in influenza, 65  
 Benzonaphthol, 14  
 Bezold mastoiditis, 405  
 Biceps, gumma of, 85, 129  
 Bichloride in urethritis, 86  
 Bichromate of potash as expectorant, 352  
 Biliary passages, operative surgery of, 247  
 Bilious headache, massage in, 411  
 Bismuth, as dressing for umbilical cord, 22  
   subiodide in typhoid, 96  
 Bladder, treated through a suprapubic section, 419  
   Tumors of, 165, 575  
 Blepharitis vaccine, 251  
 Blindness in 32,000 eyes, 130  
 Blood, coagulation, 95  
   in diabetes, 424  
   Specific gravity of, in disease, 96  
 Blue mass in dysentery, 270  
 Bone, carious, removed by pepsin and acid, 214  
   structure, changes in, with chronic heart and lung troubles, 56  
 Bones, hereditary syphilis of, 128  
 Bradycardia, 363  
 Brain, bullet in, 317  
   softening, after ligature of common carotid, 107  
 Brandt, treatment in diseases of women, 258  
 Breast, amputation of, 214  
 Bright's disease, factors contributing to, 181  
   Pia mater in, 362  
   Regimen in, 523  
 Bromamide, 138  
 Bromide, of ethyl, 304  
   as anæsthetic, 433  
   of strontium in vomiting, 357  
 Bromoform, in pertussis, 135, 354  
   Poisoning by, 313  
 Bundle, an obstetric, 155  
 Burns, treatment of, 413  
 Bursa, prepatellar, detachment of lining, 447  
 Cactus, grandiflorus, action on heart, 4, 136  
 Cæcum, rupture of, 400  
 Cæsarean section, 342  
 Caisson work in bladder surgery, 553  
 Calcium, muriate, in tuberculosis, 67  
   salts of, 194  
 Calculus, renal, passed by bowel, 182  
   Submaxillary, 216  
   Vesical, in female child, 84  
 Camphor, poisoning by, 123  
 Camphoric acid in night sweats of phthisis, 160  
 Cancer, etiology of, 362  
   Mammary, pyoktanin in, 4  
   Microbe of, 334  
   of ear, 402  
   of stomach, frozen milk in, 240  
   Pathogeny of, 177  
   Protozoa in, 563  
   Uterine, early treatment for, 442  
   radical treatment of, 73  
 Cannabis indica, intoxication from, 123  
 Cantharides as cause of cystitis, 46  
 Carbolic acid in carbuncle, 494  
 Carbonic acid, effects of respiring on man, 38  
 Carbon sulphide, inhalations of, in phthisis, 356  
 Carcinoma, of kidney, 362  
   of mamma, 513, 523  
   of rectum, excision of, 514  
   Pathological conditions of mamma in, 111  
   Primary, symmetrical, 260  
   Protozoa found in, 514, 515  
 Cardiac, mechanism, 375  
   pain, and angina, 39  
   Forms of, 331  
   symptoms in gastric ulcer, 43  
   thrombosis, 365  
 Cardiopathy, syphilitic, 484  
 Carotid, brain-softening after ligature of, 107  
   compression in convulsions, 466  
   Common, ligature of, 215  
   Internal, false aneurism of, 39  
 Cataract, from concussion, 251  
   Secondary, discision of, 253  
   How to deal with, 150  
 Catgut in gynæcological operations, 174  
 Catarrh, intestinal, tartar emetic in, 68  
   Vesical, in female, 463  
 Cautery, solar, 474  
 Cellulitis, orbital, 83  
 Cerebellar abscess, operation in, 437  
 Cerebral, abscess, 296  
   œdema, 196  
 Cervix, uteri, amputation of vaginal portion, 254  
 Chancre, double "a distance," 318  
   in women, 85  
 Chancroid, etiology of, 84  
   Intra-urethral, 86  
 Cheiro-pompholyx, 80  
 Chemotaxis, 230  
 Cheyne-Stokes respiration, 566  
 Chieromegaly, 36  
 Children, erythema nodosum in, 322  
   Gonorrhœal rheumatism in, 319  
   Hepatic cirrhosis in, 286  
   Meningitis in, 330  
   Uric acid diathesis in, 422  
 Chloralamide, 205  
 Chlorobrom in sea-sickness, 461  
 Chloroform, in organic heart disease, relation to parturition, 340  
 Chloroform, poisoning by, 26, 124  
 Chlorosis, in male, 527  
   Stomach chemistry in, 5  
 Cholecystotomy, 285  
   Ideal, 264  
 Cholera, 385, 501-503, 517  
   Salol in, 552  
 Chordæ tendinæ and musical heart murmurs, 429  
 Chorea, hereditary, 197  
   in its cardiac relations, 297  
   Sodium salicylate in, 497  
 Choroid, tubercles in, 344  
 Chorioiditis metastatic, 455  
 Chrysarobin in hæmorrhoids, 497  
 Circulation, cerebral, during epileptic attack, 106  
 Cirrhosis, hepatic, in children, 286  
   Hypertrophic, of liver, 181  
 Club-foot, congenital, 64, 561  
   Double congenital, in adult, 251  
   Early correction in, 391  
 Coal-oil poisoning, 125  
 Cocaine, dangerous symptoms from, 25, 483  
   in eye enucleation, 252  
   in genital irritation, 65  
   in hay fever, 65  
   in peritonitis, 21  
   in uterine injections, 247  
   poisoning, 50, 126, 158, 172  
   in hydrocele, 400  
 Codeine, untoward effects of, 268  
 Cod-liver oil injections in phthisis, 50  
 Coffee as cause of pruritus ani, 143  
 Colchicum causing pyralism, 64  
 Cold, treatment of, 16  
 Colic, anal, pichi in, 164  
 Colloid treatment of nocturnal incontinence, 311  
 Colocynth, poisoning by, 314  
 Colotomy, indications for, 192  
   Inguinal, 44, 412  
 Concussion cataract, 251  
 Condylomata of auditory canal, 404  
 Congestion, pulmonary, phlebotomy in, 189  
 Conjunctiva, scarification of, followed by fatal hemorrhage, 133  
   xerosis, 151  
 Conjunctivitis, granular, treatment of, 343  
 Constipation, prolonged, 316  
 Constriction, elastic, as a hæmostatic measure, 488, 534  
 Consumption, tobacco in, 373  
 Consumptives, dietetic management of, 356  
 Contagion in tuberculosis, 101, 241  
 Copper arsenite, in diphtheria, 357  
   in summer complaint, 414  
 Copper in anæmia, 68  
 Cornea, laceration of, 457  
   Suture of, 212  
 Corrosive sublimate, fatal poisoning by, 125  
 Cow-pox, accidental, 186

- Craniectomy, 437  
 Linear, for microcephalus, 108  
 Creatin, action of, on human tuberculosis, 355  
 Creoline in eczema, 322, 473  
 Creosote, formula for administration of, 351  
 injections in cervical metritis, 49  
 in phthisis, 160, 414, 497  
 in tuberculosis, 20  
 poisoning, 201  
 Croup, catarrhal, as manifestation of lymphatism, 9  
 in eleven-months-old child, 248  
 Membranous, treatment of, 309  
 Treatment of, without tracheotomy or intubation, 183  
 of nose, 451  
 Treatment of, 347  
 Crowds, accidents of, 516  
 Cyst, abdominal, in foetus, 328  
 Chromic acid in, 68  
 Dermoid, in male, 328  
 Intraorbital, 132  
 of liver, causing dystocia, 218  
 of middle turbinated, 299  
 of tonsil, nose, larynx, and ear, 298  
 Retention, of anterior nasal fossæ, 299  
 Traumatic epithelial, 562  
 Cystic, condition of appendix without symptoms, 377  
 duct, rupture of, 331  
 Cystitis, bacteriology of, 292  
 Chronic salol in, 312  
 due to cantharides, 46  
 Gonorrhœal, santol in, 165  
 Medical treatment of, 129  
 Salicylic acid in, 128  
 Cystoscopy, electric, 421  
 Deafness simulated, 532  
 Death, by falling, 191  
 Sudden, from nervous causes, 439  
 Debility, heart in, 40  
 Defecation, aid to, 68  
 Defects, congenital, in lower extremities, 64  
 Deformities in spastic paralysis, 63  
 Delirium tremens, treatment of, 411  
 Dementia paralytica and syphilis, 297  
 Deposits separated from fluids by centrifugal machine, 156  
 Dermatitis herpetiformis, 323  
 Dermatology, iodine, carbolic, and chloral in, 476  
 New remedies in, 474  
 Dermoid cyst, containing heart, 521  
 of testis, 47  
 Diabetes, amputation in, 370  
 Antipyrin in, 311  
 Blood in, 424  
 cured by measles, 335  
 Etiology of, 369  
 Jambul in, 68  
 Lesions of pancreas in, 193  
 mellitus, 369  
 New remedy in, 205  
 Strontium lactate in, 491  
 Diarrhœa, ataxia after, 198  
 Dyspeptic, in infants, 269  
 Phthisical, enema for, 355  
 Salol in, 415  
 Strychnine and digitalis in, 492  
 Diarrhœal diseases, use of fruits in, 21  
 Diet and exercise in chronic inflammations, 16  
 Digestion, artificial, in œsophageal obstruction, 284  
 Weak, 351  
 Digestive diseases, diagnosis of, 389  
 Digitalis, and aortic regurgitation, 429  
 and strychnine in diarrhœa, 492  
 in aortic disease, 157, 208  
 in renal affections, 347  
 Diphtheria, aphasia after, 522  
 Arsenite of copper in, 357  
 Classification of, 246  
 Early diagnosis in, 117  
 Early nervous symptoms in, 122, 232  
 Local treatment by potassium permanganate, 139  
 New treatment for, 19  
 Paralysis after, 118  
 Peroxide of hydrogen in, 549  
 Surgical treatment of, 120  
 Treatment of, 117, 205  
 Diplopia, monocular as a cerebral symptom, 152  
 Disease, mild *vs.* severe forms of, 231  
 with nervous symptoms and urinary changes, 359  
 Displacements, posterior uterine, sound in, 113  
 Disturbance, functional, of heart and pulse, 284  
 Diuretin, employment of, in children, 292  
 Dog-bite, treatment of, 459  
 Drainage by gauze-packing, 171  
 Perineal, in stricture, 167  
 Dropsy, apocynum cannabinum in, 312  
 Pathology of, 461  
 Dry heat, in eye inflammations, 252  
 Duodenum, simple ulcer of, 347  
 Dupuytren's finger contraction, 524  
 Dysentery, amœbic, treatment of, 415  
 and pytalism, 553  
 Blue mass in, 270  
 Chronic, enema for, 355  
 Etiology of, 337  
 Rectal treatment of, 310, 357  
 Dysmenorrhœa, actea racemosa in, 209  
 Dyspepsia and digestion, 471  
 Catarrhal, 44  
 Dyspnoea, drugs in, 505  
 Dystocia, due to hepatic cyst, 218  
 Ear, cancer of, 402  
 Cysts of, 298  
 Injury of, by lightning, 81  
 Ears, disorders of, in typhoid fever, 455  
 Surgical treatment of diseases of, 531  
 Earthworms as germ-carriers, 423  
 Eclampsia, 340  
 Micro-organisms in, 246  
 Provoking early delivery, 485  
 Remedies in, 239  
 Eczema, creoline in, 322, 473  
 Management of, 476  
 Seborrhœic, relation to other diseases, 76  
 Treatment of, 326  
 Treatment of, in Paris hospitals, 80  
 Ehrlich's test in typhoid fever, 274, 322  
 Electric light, effect of, on eyes, 150  
 in antral disease, 239  
 Electricity in gout and rheumatism, 4  
 Electrolysis in removal of hairs, 228  
 in urethral stricture, 89, 419  
 Embolism of arteria centralis retinæ, 533  
 Emphysema jacket, 309  
 Empyema of antrum, with œzæna, 348  
 Endarteritis, chronic proliferating, 189  
 Endocarditis, chronic infective, 180  
 of pulmonary valve, 89  
 Secondary ulcerative, 54  
 Tuberculous, 49  
 Endometritis clinically considered, 440  
 Endoscope in urethritis, 164  
 Enucleation of eye, cocaine in, 252  
 Enteric fever, treatment of, 183  
 Enteroclysis in intestinal disease, 553  
 Enteroptosis, 572  
 Epididymitis, dry poultice in, 128  
 Treatment of, 167  
 Epiglottitis, symptoms from enlargement of, 453  
 Epilepsy, ammonium bromide and antipyrin in, 142  
 from surgical standpoint, 200  
 Traumatic, trephining for, 11  
 Urine in, 247  
 Epileptic attack, cerebral circulation during, 106  
 Epistaxis, 450  
 Rare cause of, 299  
 Epithelioma, local treatment of, 473  
 of auricle, 404  
 of upper lip, 266  
 Equino-varus, congenital, 153  
 operation for, 153  
 Ergot, for polyuria in phthisis, 21  
 practice of administering, 396  
 Erysipelas, 346  
 Facial, ichthyol in, 306  
 Pilocarpine nitrate in, 306  
 Mechanical treatment of, 23  
 of pharynx and larynx, 348  
 Relation to phagocytosis, 465

- Erythema nodosum, in children, 323  
 Ethmoid cells, disease of, 7  
 Ethmoiditis, necrosing pathology of, 293  
 Ethyl-bromide, 203, 304  
 Euophen, 409  
   in eye disease, 456  
   in minor surgery, 302  
 Exalgine, 305  
   in Graves' disease, 309  
   poisoning, 123  
   Toxicity of, 415  
 Exanthematous mixed infection, 32  
 Exercise and diet in chronic inflammations, 16  
 Exophthalmic goitre, 374  
 External auditory canal, sarcoma in, 81  
 Eye, artificial, a new, 151  
   Early insertion of, 151  
   -ball, sloughing of in hemorrhagic diathesis, 36  
   Foreign body in, 240  
   in pernicious anæmia, 83  
 Fæces retained, 377  
 Faradization of chest-wall after operation for scirrhus, 468  
 Fat, assimilation as affected by deep inspiration, 230  
   embolism, 190  
   after fractures, 110  
   necrosis, 570  
 Faucial pillars, defects in, 83  
 Femoral, artery, embolism of, 284  
   vein, wounds of, 11  
 Femur, hydatid of, 186  
 Ferric chloride tincture, 529  
 Fever, chewing-gum in, 541  
   Cold applications in, 541  
 Fever, enteric, hemiplegia after, 426  
   Feeding in, 540  
   in infant, 91  
   Noma in, 275  
   Influence of one, on another, 31  
   Thermic, 464  
   Typhoid, and typho-malarial, 426  
   Salol in, 206  
 Fevers, eruptive, itching in, 475  
 Fibrin ferment as a styptic, 268  
 Fibroids after menopause, 114  
 Filaria sanguinis hominis, 232, 233, 460, 490  
 Fingers, dislocation of, 479  
 Firwein, 137  
 Fistula, subcutaneous tenotomy of sphincter ani for, 25  
 Fistule, urinary and anal, 86  
 Flat-foot, radical cure of, 251  
   Slighter forms of, 486  
 Fly-bite, death from, 423  
 Fœtus, abdominal cyst in, 328  
 Food preservatives, 382  
 Forceps, axis-traction,  
 Foreign body in eye, 240  
 Formol, study of, 351  
 Fossa, digastric, mastoid abscess opening into, 343  
 Fossæ, nasal, retention cysts of, 299  
 Fracture, delayed consolidation in, 248  
   Fat embolism after, 110  
   of humerus, 478  
   of scapula, 266  
   Treatment of, 263  
   Ununited, in long bones of children, 109  
 Fruit eating, 327  
 Fruits in diarrhoeal diseases, 21  
 Furuncles, 322, 475  
 Gallacetophenone, 133  
 Gall-bladder surgery, 515  
 Gall-passage, affections of, 57  
 Gall-stones, impacted, causing peritoneal cyst, 162  
 Galvanism, in head palsy, 198  
 Gangrene from antipyrine injections, 5  
   Senile, early high amputation in, 513  
 Gas, illuminating, poisoning by, 519  
 Gasoline poisoning, 519  
 Gastric catarrh, infectious, 92  
 Gastrodiaaphany, 551  
 Gauze-packing for drainage, 171  
 Generative organs, imperfect development of, as a cause of disease, 70  
 Genital, irritation, cocaine in, 334  
   tract, immediate examination of, after labor, 397  
 Genito-urinary practice, 420  
 Genu-pectoral position, 398  
   -valgum, incipient, splints for, 64  
 Glanders, acute, 57  
   Case of, 34  
   A new test for, 522  
 Glands, suppurating inguinal, 22  
 Glaucoma, after operation for secondary cataract and iridocystitis, 132  
   after secondary cataract, 253  
   unusual history in, 403  
 Glioma of cord, 564  
 Glycerine in tonsillar hypertrophy, 206  
 Glycerin suppositories, distant action of, 137  
 Glycosuria, caused by lesion in fourth ventricle, 335  
 Goitre, osmic acid in, 110  
 Gonorrhœa, acute, methyl blue in, 85  
   New treatment of, 169  
   of rectum, 420  
   Prophylaxis of, 220  
   Rheumatism in, 234  
   Treatment of, 130  
 Gottstein's curette, for adenoids, 223  
 Gout, electricity in, 4  
   of the penis, 184  
 Gradle's forceps for adenoids, 223  
 Graves' disease, exalgine in, 309  
   œdema in, 42  
 Grippe, a cerebro-spinal neuralgia, 94  
   effect on pneumogastric nerves, 368  
   Modified continued fever following, 368  
 Guaiac as purge, 14  
 Guaiacol, action of, 101  
   in tuberculosis, 51, 161, 206  
   Use of, 16  
 Gumma of biceps, 85, 129  
 Gunshot wounds, penetrating, of abdomen, 145  
 Gynæcological operations, catgut in, 174  
 Gynæcology, minor, 75  
   Relation to intrapelvic inflammations, 511  
 Hæmatemesis in anæmic young women, 465  
 Hæmatoma, of sterno-mastoid, causing torticollis, 238  
   of vulva, 239  
 Hæmatoporphyrinuria, 361  
 Hæmaturia, malarial, value of quinine in, 378  
 Hæmoglobinuria, 168  
 Hæmoptysis, atropine in, 67  
   in advanced life, 38  
 Hæmorrhoids, chrysarobin in, 496  
 Hair, the, 325  
 Hand disinfection, 113  
 Hay, asthma, 161, 556  
   fever, cocaine in, 65  
   Terpin hydrate in, 19  
 Head, gunshot wound of, 317  
 Hearing, accurate tests for, 210  
 Heart, action on, of cactus grandiflorus, 4  
   -action, coupled rhythms of, 100  
   -disease, chloroform in, as an aid to parturition, 340  
   Unsuspected, 180  
 Functional disturbance of, 284  
   in chronic phthisis, 41  
   in debility, 40  
   lesion, permanent, caused by anæmia, 416  
   Malformation of, 525  
   murmurs, musical, and chordæ tendinæ, 429  
   Non-valvular, 375  
   Ruptured, 282  
   symptoms, unusual, after injury, 42  
 Hematuria, malarial, 183  
 Hemi-albuminuria, 384  
 Hemiplegia after enteric fever, 426  
 Hemorrhage, after tonsillotomy, 222  
   Fatal, in infant after scarification of conjunctiva, 133  
   Post partum, 396  
   Lead acetate in, 396  
   Secondary, after ovariectomy, prevention of, 509  
   Umbilical, treatment of, 69  
 Hemorrhagic diathesis, sloughing of eyeball in, 36  
 Hepatic abscess, 376



- Heredity in tuberculosis, 101  
 Hernia, Bassini's radical cure of, 107  
   Congenital, radical cure of, 107  
   Lumbar, dissection of, 401  
   Relief of incarcerated, 310  
   Ventral, from abdominal section, operation for cure of, 383  
 Hernial sac, spontaneous rupture of, 214  
 Herniotomy (report on 200 cases), 260  
 Herpes, tonsillitis, 122  
   of larynx, 121  
 Hiccough, cured by supra-orbital pressure, 306  
   Physostigma in, 133, 158  
 High temperature after labor, 218  
 Hip, congenital dislocation of, 154, 296  
   Operation in old cases of, 250  
   -joint disease, 62  
     Classification of, 560  
     Diagnosis of, 62  
     Early treatment in, 62, 561  
     New traction splints for, 62  
     Transient form of, 485  
 Hirsuties, Electrolysis in, 473  
 Homatropine, poisoning from, 132  
 Hot weather, proper diet for, 367  
 Humerus, fractures of, 478  
 Hydatid of femur, 186  
 Hydrencephalocele, 329  
 Hydrocele, operation for, 24  
 Hydrogen, disulphide in urine, 379  
   peroxide, 409  
 Hydronephrosis, nephrectomy, 166  
 Hyoscine poisoning, treated by pilocarpine, 204  
 Hyoscyamine as mydriatic, 252  
 Hypnotism, possibility of crime during, 28  
 Hypodermoclysis, 537  
 Hypophosphites, use of, 13  
 Hysterectomy without pedicle, 511  
 Hysteria, urine in, 247  
  
 Ice-cream in gastric ulcer, 162  
 Ichthyol, in facial erysipelas, 306  
   Poisoning by, 417  
   Surgical uses of, 490  
   varnishes, 79  
 Idiocy, ocular symptoms of, 102  
 Ilio-cæcal valves, papilloma of, 484  
 Immunity, and bacterial poisons, 149  
   and infection, 30  
 Incontinence, nocturnal, collodion treatment of, 311  
 Indigo in urine, 379  
 Inertia uteri, at full term, 395  
 Infant, artificial feeding of, 406  
   Spinal column in, 248  
 Infants, suffocation of, 519  
 Injection and immunity, 30  
 Inflammation, chronic, diet and exercise in, 16  
 Influenza, and smoke, 90  
   Bacillus of, 99, 147  
   Benzol in, 65  
 Influenza, cause of, 99  
   Clinical aspects of, 187  
   Cutaneous eruptions in, 236  
   followed by meningitis, 469  
   followed by orchitis, 89  
   Microbe of, 193  
   Micro-organisms of blood in, 100  
   Necrotic character of, 104  
   Odor of, 235  
   Orchitis after, 381  
   Phenacetin in, 64  
   Post-mortem brain of, 235  
   with eruptions, 368  
 Infusion, arterial saline, 544  
   Intravenous, saline, 261  
 Insane, general paralysis, 438  
 Insanity, subcutaneous use of salt solutions in, 104  
 Insomnia in infant, 435  
 Inspiration, deep, effect of, on fat assimilation, 230  
 Intestinal, anastomosis, 265  
   catarrh, magnesium sulphate in, 310  
   obstruction from foreign body, 44  
 Intestines, abnormality of, 317  
   Gout of, 471  
   Small, congenital obliteration of, 212  
 Intracranial inflammation after otitis media, 405  
 Intubation, and tracheotomy in Boston hospitals, 119  
   of larynx, 120  
 Iodermia, cause of, 227  
 Iodide, intolerance to, 349, 440  
 Iodine trichloride in surgery, 349  
 Iodoform, as local anæsthetic, 352  
   inunctions in phthisis, 159  
   in tuberculosis, 413  
   Substitute for, 202  
 Iridochoroiditis, traumatic, 451  
 Iridocyclitis after operation for secondary cataract, 132  
 Iron, a new preparation of, in anæmia, 268  
   perchloride in typhoid fever, 18  
 Ischio-rectal space, gangrenous abscess of, 449  
 Itching in eruptive fevers, 475  
 Jaborandi, urticaria in, 157  
 Jambul in diabetes mellitus, 68  
 Japanese hot box, in eye inflammations, 252  
 Jequirity, a safe remedy, 131  
 Joint disease, atrophy in, 63  
   chronic symptoms of, 557  
   Syphilitic, 249  
   lesions, tuberculous, 250  
 Kerato-conus, galvano-cautery in, 532  
 Kidney, atrophy of, 148  
   Carcinoma of, 362  
   disease, new classification, of, 45  
   Ectropion of, 148  
   Injuries of, 418  
   Movable, double, 314  
   Tuberculosis of, treated by tuberculin, 384  
 Knee-joint, derangement demanding surgical interference, 392  
   Excision of, 393  
   Permanent flexion of, 295  
   Kreatin, action of, 408  
   Kumysgen, 545  
 Labor, premature, and abortion, 217  
   lingering, management of, 396  
 Lachrymal abscess, with fistula, 133  
 La Grippe, and suppuration, 236  
   Treatment of, 16  
 Laminectomy, 60  
 Laparotomy, for perforation in typhoid, 23  
   necessitated by gauze left in abdomen, 248  
   Uterine curetting previous to, 173  
 Laryngeal growth, subglottic, 452  
 Laryngectomy, total, 260  
 Laryngismus stridulus, fatal case of, 348  
 Larynx, bacteriology of, 427  
   Cockle-burrs in, 9  
   Cysts of, 298  
   Erysipelas of, 348  
   Herpes of, 121  
   Impaction of meat in, 567  
   Intubation of, 120  
   Sense of taste in, 92  
 Lateral curvature of adolescents, 294  
 Lead, colic, modified treatment of, 149  
   palsy treated by galvanism, 198  
   poisoning, 27  
 Leprosy, 226  
 Leucæmia, case of, 371  
 Leucocytes, effect of strychnine on, 350  
   eosinophile, diagnostic value of, in leucæmia, 370  
 Leucocytosis in lobar pneumonia, 178  
 Lichen planus, 80  
 Liquids prepared from various viscera, 147  
 Lithia waters, value of, 490  
 Litholapaxy, accident in, 165  
 Liver, adenoma of, 427  
 Locomotor ataxia, treatment of, 387  
 Lowenstein's method of opening ankle joint, 295  
 Lung, sarcoma of, 195  
 Lupus, cure of, 476  
   vulgaris, 78  
 Luschka's tonsil, hypertrophy of, 9  
 Luxatio erecti humeri, 109  
 Lymphadenia ossium, 117  
 Lymphatism, 9  
  
 Magnesium sulphate in intestinal catarrh, 310  
 Malarial hæmaturia, 183  
 Malaria, methyl blue in, 138, 308, 415  
   Pernicious, 56  
   Treatment of, 543

- Malignant tumors, aniline dyes in, 139  
 Maltine with peptones, 548  
 Mamma, male, fibro-adenoma, of, 468  
     pathological relations with carcinoma, 111  
 Margarine as a transmitter of disease, 423  
 Marriage question from gynæcological standpoint, 256  
 Massage in bilious headache, 411  
 Mastoiditis, Bezold variety of, 405  
 Measles, followed by paralysis, 103  
 Menstruation during, 330  
     Paralysis after, 273  
     Prodromal angina of, 147  
 Meckel's diverticulum as cause of intestinal obstruction, 535  
 Medication by diurnules, 351  
 Melancholia in phthisis, 373  
 Meningitis, after influenza, 469  
     Chronic tubercular, 565  
     Basilar, after injury, 94  
     hemorrhagica interna, 37  
     in children, 330  
 Menopause, metrorrhagia at, 255  
 Menton de galoche, 391  
 Methods for preventing spread of phthisis, 277  
 Methyl blue, in gonorrhœa, 85  
     in malaria, 138, 308, 415  
 Methylene for internal administration, 489  
 Metritis, cervical, creosote injections in, 49  
 Metrorrhagia at menopause, 255  
 Microcephalus, linear, craniotomy for, 108  
 Microcidine, 333  
 Micrococcus pneumoniæ crouposæ, 277  
     pyogenes aureus, reaction for, 366  
 Micro-organisms in eclampsia, 246  
 Micropsia reflex, 454  
 Middle ear, transudation into, 532  
 Milk, frozen, in cancer of stomach, 240  
     Sterilization of, 301  
     sickness, 237  
 Mistletoe as an oxytoxic, 312  
 Mono-methylamine, effects of, 293  
 Morning sickness in males, 237  
 Morphine hydrobromate, 457  
 Movements, synchronous, of upper extremities, 198  
 Mydriatic, alkaloids, 152  
 Myocarditis, primary suppurative, 386  
 Myocardium, lesions of, in exanthemata, 364  
 Myopia, development of, 82  
 Myxœdema, nervous element in, 178  
     Thyroid juice in, 539, 540  
     Treatment of, 539  
 Nævi, electrolysis of, 155  
 Nails, annual shedding of, 95  
 Naphthalin vapor in whooping-cough, 334  
 Nasal, hemorrhage, control of, 555  
     polypi, radical treatment of, 8  
     stenosis, effect of, on general health, 554  
 Naso-pharyngeal hemorrhage, 299  
 Needles, hypodermic, preservation of, 156  
 Nephrectomy, for hydronephrosis, 166  
 Nephritis, acute, treatment of, 416  
     Hemorrhagic, 362  
     Scarlatinal, prophylaxis of, 101  
 Nephrolithotomy, 418  
 Nephrorrhaphy, 418  
 Nerve, grafting, 276  
     Recurrent laryngeal, fibres in, 453  
 Nervous diseases, diagnosis of, 199  
 Neuralgia, caused by tænia, 275  
     facial, salt in, 106  
     Obscure sciatic, 435  
     trigeminal, surgical treatment of, 200  
 Neurasthenia, treatment of, by transfusion of nervous substance, 197  
 Neurectomy, intracranial, 197  
 Neuritis, after influenza, 565  
     multiple alcoholic, in young child, 106  
     Optic, a form of peripheral neuritis, 103  
     sciatic, venesection in, 199  
 Neuroses as related to rheumatism, 233  
 Nitrites, therapy of, 204  
 Nitroglycerine, dose of, 409  
     in Reynaud's disease, 141  
 Noma, in enteric fever, 275  
     Malignant, 272  
 Nose, cosmetic surgery of, 555  
     cysts of, 298  
     Hemorrhage from, 299  
 Noses, sunken, restoration of, 555  
 Nutmeg poisoning, 458  
 Nutrition, 367  
 Oat-meal pyrosis, 375  
 Obesity, diet in, 501  
 Obstruction, intra-nasal, effect on general health, 348  
 Ocular appearances, 230  
 Œdema, cerebral, 196  
     in Graves' disease, 42  
 Œsophageal obstruction, 284  
 Œsophagotomy, 11  
 Ointments, 79  
 Old remedy, new use for, 204  
 Olecranon, fractured suture of, 109  
 Omentum, hydatids of, 568  
 Oöphoro-salpingitis, 463  
 Operation for suspected perforation in gastric ulcer, 375  
 Ophthalmia, purulent, 343  
 Ophthalmometer, 402  
 Opium disease, 182  
 Optic nerve, autopsy of, in child, 457  
     Tumors of, 403  
     neuritis, double craniectomy in, 437  
 Orchitis, acute, after influenza, 381  
     after influenza, 89  
 Osteomyelitis, streptococcus, treatment of, 265  
 Otitis, media, as caused by reclining posture in fevers, 131  
     followed by intracranial inflammation,  
 Ouabain, action of, 14  
 Ovarian cyst, in infant, 184  
     with torsion of pedicle, 510  
 Ozæna with empyema of antrum, 348  
 Ozone in phthisis, 550  
 Ozonized air in tuberculosis and anæmia, 5  
 Pain in sole of foot after walking, 467  
 Palimptosis after injury, 344  
 Pancreas, injury of causing peritoneal effusion, 470  
     Lesions of, in diabetes, 193  
 Pancreatic disease, diagnosis of, 358  
 Paper money as carrier of infection, 423  
 Papilloma of ilio-cæcal valve, 484  
     of larynx in child, 333  
 Papoid in cysts and abscesses, 352  
 Paraldehyde, dose of, 135  
     Hypnotic and diuretic, 350  
     Large dose of, 127  
     Poisoning by, 26  
 Paralysis, after measles, 273, 568  
     Bilateral of external recti, 196  
     following acute diseases, 239  
     following measles, 103  
     of diphtheria, 118  
     Pseudo-bulbar, 435  
     Spastic, deformities in, 63  
     Operative treatment of, 249  
 Paraplegia from compression in Pott's disease, 297  
 Paresis, general etiology of, 105  
 Patella, reflex, pseudo, 436  
 Patent ventricular septum, 281  
 Pectoralis major, in complete development of, 486  
 Pelvic, abscess, 445, 446  
     contraction, laparo-hysterec-tomy, 398  
     drainage in bleeding after laparotomy, 74  
     surgery, complications in, 113  
 Penis, fracture of, 318  
     Gout of, 184  
 Pepsin and acid, removal of carious bone by, 214  
 Pericarditis purulent, 526  
     with cloudy effusion, 55  
 Perinæum, laceration of, 115  
     Minor lacerations of, 253  
     Absence of, 572  
 Peritoneum, cyst of, 162  
     Nævus of, 569  
 Peritonitis, after rupture of cæcum, 400  
     Cocaine in, 21  
     Pilocarpine in, 163

- Peritonitis, septic, factors producing, 429  
 from bone in stomach, 45  
 Surgical treatment of, 462  
 Tubercular, 333  
 Perforation in, 472  
 Pernicious anæmia, affection of eyes in, 82  
 Peroxide of hydrogen, in cysts and abscesses, 352  
 in diphtheria, 549  
 Pertussis, bromoform in, 135  
 Treatment of, 33  
 Petroleum in skin disease, 323  
 Phagocytes, 465  
 Phagocytosis, relations with erysipelas, 465  
 Pharynx, erysipelas of, 348  
 Phelps's operation, 250  
 Phenacetin, as antipyretic, 495  
 causing vasomotor disturbance, 458  
 in influenza, 64  
 Local use of, 494  
 Toxic symptoms from, 50  
 Phenocoll, 495  
 Phlebitis, hyperplastic, 566  
 Phlebotomy, in pulmonary congestion, 189  
 Visceral, 355  
 Phlegmon of neck, 382  
 Phonation, inspiratory, 50  
 Phthitical cavity causing abscess, 331  
 Phthisis, creosote in, 160  
 camphoric acid for sweating in, 160  
 chronic, heart in, 41  
 Cod-liver oil injections in, 50  
 Creosote in, 414  
 Ergot for polyæura in, 21  
 Inhalations of carbon sulphide in, 356  
 in later adult life, 526  
 Iodoform inunctions in, 159  
 Melancholia in, 373  
 Ozone in, 550  
 Prevention of spread of, 277  
 Pulmonary tissue in sputum of, 527  
 Shurley-Gibbes' treatment of, 1  
 Urine in, 336  
 Physostigma in hiccough, 133, 158  
 Pia mater, in Bright's disease, 362  
 Tubercle of, 346  
 Pichi in renal colic, 164  
 Pilocarpine, in atropine poisoning, 157  
 in dermatology, 226  
 in hyoscine poisoning, 204  
 in peritonitis, 163  
 Nitrate, in facial erysipelas, 306  
 Piperazine, urticaria after, 547  
 Placenta prævia, syncope in, 339  
 Pleural effusion, causing cardiac displacement, 374  
 Pleurisy, acute, analogy of, with acute rheumatism, 372  
 Aspiration in, 469  
 Hemorrhagic, 3  
 Medical treatment of, 20
- Pleurisy occurring in animals, 292  
 Purulent, 195  
 Pleuritic effusions, surgical treatment of, 470  
 Pneumathemia, 467  
 Pneumogastric nerves, effect of grippe on, 368  
 Pneumonia, acute croupous, treatment of, 208, 505  
 Cardiac indications in, 372  
 Lobar, leucocytosis in, 178  
 Œdema pulmonum in, 504  
 Strychnine in, 207  
 Treatment of, 462  
 Turpentine in, 414  
 Pneumotomy for lung abscess, 536, 550  
 Pneumonitis, experimental, in rabbit, 176  
 Pneumothorax following abortion, 182  
 Polydactylism, 480  
 Polytrichium, 408  
 Pyuria in phthisis, 21  
 Pons, tumor of, 29  
 Posology, duodecimal, 365  
 Posture, reclining, in fever, as cause of otitis media, 131  
 Potassium, chlorate, poisoning by, 94  
 Cyanide, poisoning by, 126  
 Iodide, new method of administration, 15  
 Permanganate in snake-bite, 66  
 Locally, in diphtheria, 139  
 Pott's disease, 61  
 Abscesses in, 61, 392  
 Bilateral, lumbar abscess in, 116  
 Compression, paraplegia following, 297  
 Diagnosis in, 61  
 Mechanical treatment in, 61  
 Recumbency and head traction in, 117  
 Poultice, dry, in epididymitis, 128  
 Pregnancy, early diagnosis of, 218  
 Premature labor, antifebrin in, 142  
 Presentation, transverse, 217  
 Proptosis after injury, 344  
 Prostate, function of, 430  
 Hypertrophy of, 87, 89  
 Sarcoma of, 107  
 Surgery of, 166  
 Prostatectomy, 87, 89  
 Pruritus, 228  
 Ani, coffee as cause of, 143  
 Ointment for, 334  
 Teucrium scordium in, 143  
 Psoriasis, rhus tox. in, 547  
 Treatment of, 92  
 Ptyalism from colchicum, 64  
 Puerperal fever, 340  
 Pulmonary consumption, treatment of fever in, 269  
 Pulsation, venous, 283  
 Pulse, functional disturbance of, 284  
 in stupor, 42  
 Pupils unequal, 91  
 Purpura hemorrhagica, case of, 35  
 Pyoktanin in mammary cancer, 4
- Pyrogallic acid, 417  
 Pyuria, a new remedy in, 270  
 Quinine, hypodermatically, in vomiting, 51  
 Pronunciation of, 520  
 Radius, backward dislocation of head of, 401  
 Rectal, carcinoma, 261  
 Derangement in women, 259  
 Gonorrhœa, 420  
 injections in dysentery, 310  
 Rectum, imperforate, 287, 480  
 Rectus, inferior, traumatic rupture of, 212  
 Internal, laceration of, 211  
 Reflexes, electro-physiology of, 29  
 in hip-disease, 250  
 Refraction by tilted lenses, 133  
 1500 cases of, 82  
 Remedies, localization of about sensory nerves, 15  
 Renal affections, digitalis in, 347  
 Resection of hands and feet, longitudinal incision in, 110  
 Resorcin in gastric ulcer, 269  
 Respiration, artificial, in asphyxia neonatorum, 343  
 Respiratory diseases, Butcher's method in, 498  
 Rest in the fever of pulmonary consumption, 269  
 Restoration of apparently drowned, 382  
 Retroflexion, vaginal fixation in, 439  
 Reynaud's disease, nitro-glycerine in, 141  
 Rheumatic fever, hyperpyrexia in, 18  
 Rheumatism, abarticular, 365  
 Acute, analogy with acute pleurisy, 372  
 and oxalic acid, 308  
 Salophen in, 353  
 Bradycardia in, 183  
 Chronic, mechanical treatment of, 413  
 Gonorrhœal, 234  
 in children, 319  
 Relation of, to neurosis, 233  
 Uric acid in, 234  
 Rhus, in psoriasis, 547  
 poisoning, treatment of, 417  
 Rickets with synchronous heart beats, 283  
 Rider's bone, 190  
 Ringworm, 326  
 Treatment of, 476  
 Röheln, 272  
 Outbreak of, 364  
 Rumination in man, 521  
 Sacral tumors, congenital, 260  
 Salicylic intoxication, 122, 158  
 Saline infusion, intravenous, 261  
 Salipyrin, 203  
 Salol, in cholera, 552  
 in chronic cystitis, 312  
 in diarrhœa, 415

- Salol, in typhoid, 96  
 Salophen, therapeutics of, 491  
 Salt, in facial neuralgia, 106  
   subcutaneously in insanity, 104  
 Santol in gonorrhœal cystitis, 165  
 Sarcoma in external auditory canal, 81  
   of tonsil, 556  
 Scalds, treatment of, 413  
 Scapula, fracture of, 266  
 Scarletina, adenitis in, 180  
   Belladonna as prophylactic in, 18  
   Rare complication of, 33  
 Scarlatinal nephritis, prophylaxis of, 101  
 Scarlet-fever, antifebrine in, 495  
   followed by typhoid, 327  
 Scientific temerity, 382  
 Scoliosis, wood corset in, 110  
 Sea-sickness, 460  
   Chloroform in, 461  
 Semicircular canals, function of, 131  
 Semi-lunar ganglion, removal of, for neuralgia, 436  
 Serous membranes, inflammation of, 372  
 Sewer-gas as cause of typhoid, 31  
 Sexual perversion, 420  
 Shoulders, double dislocation of, 107  
 Shurley - Gibbes treatment in phthisis, 1  
 Sick, bed-clothing for, 488  
 Silver in urethritis, 222  
 Sinapisms, anodyne, 351  
 Sinuses, after abdominal section, 508  
   Long-standing, in tubercular joints, aseptic closure of, 153  
 Skin, bony deposits in, 35  
   Uremic eruption of, 46  
   disease, antimony in, 323  
   Constitutional treatment of, 272  
   Epidemic, 77  
   grafting, 545  
   Petroleum in, 323  
   Rare form of, 75  
   Transplantation of, 544  
 Skull, bullet-wound of, 316  
 Smoke and influenza, 90  
 Snake-bite, potassium permanganate in, 66  
 Soaps, medicated, 321  
 Sodium, benzoate, 410  
   salicylate in chorea, 497  
 Solanine in stomach affections, 149  
 Solar cautery, 474  
 Somnol, 159  
   Action of, 291  
   in mental affections, 106  
 Sound, uterine, in posterior displacements, 113  
 Sparteine sulphate, for angina pectoris, 548  
   for tremors, 303  
 Spasm, infantile respiratory, 567  
   Persistent masticatory, 30  
 Speech centre, 37  
 Spermatocystitis, 422  
 Sphincter ani, subcutaneous tenotomy of, for fistula, 25  
 Spina-bifida, excision of, 392  
   Radical cure in, 51  
   with talipes, 273  
 Spinal, abscess, treatment of, 293  
   column in infant, 248  
   compression, laminectomy, 60  
   injury, paper jacket in, 116  
   Roto-lateral curvature of, 153  
   surgery, 60  
 Spine, cervical fractures and injuries of, 250  
   Surgery of, 58  
 Spleen, gunshot wound of, 447  
 Spondylitis, with roto-lateral curvature, 61  
 Sterility, in nulliparæ, 113  
   Menopause fibroid tumors after, 114  
 Sternum, fracture of, 108  
 Stomach, cancer, frozen milk in, 240  
   Sudden death in, 101  
   disease, medical diagnosis in, 286  
 Spray in, 551  
   Solanine in, 149  
   Fermentation, 389  
   Illumination of, 430  
   Perforation of, from cardiac aneurism, 100  
   Tuberculous ulcer of, 569  
   Ulcer of, frozen milk in, 240  
   -washing, dangers of, 388  
 Stomatitis, aphthosa, 43  
 Stomatocystitis, 471  
 Stone in bladder, 576  
   around catheter, 573  
   Operations for, 422  
 Streptococcus, mixed infection with the typhoid bacillus, 5  
   Osteomyelitis, 265  
 Strongulus, Gigas, 185  
 Strontium, in vomiting, 357  
   lactate, 546  
   in diabetes, 491  
   Salts of, 302  
 Strychnine, action of, on leucocytes, 350  
   and digitalis in diarrhoea, 492  
   in excitant and paralytic doses, 304  
   in pneumonic crisis, 207  
   in shock, 493  
 Stump, conical, after amputation, 109  
 Stupor, pulse in, 42  
 Styptic colloid with mercury, 496  
 Subclavian, ligature of, 215  
   Left, ligation of first part of, 399  
 Subconjunctival injections with sublimate solution, 292  
 Sugar, disappearance of, from diabetic urine just before death, 335  
 Sulfonal, 203  
   in cramps from fractures, 412  
   poisoning, 361  
 Sulfonal, toxic action of, 271  
   Unfavorable effects of, 134  
 Summer complaint, arsenite of copper in, 414  
 Sunburn and tan, teteology of, 425  
 Suppuration and la grippe, 236  
 Surgery, orthopedic, indications for operations, 295  
   Vertebral, 60  
 Sycosis and acne rosacea, 227  
 Symphysiotomy, 395, 431  
 Synchronous movements of eyelid and jaw, 454  
 Syncope in placenta prævia, 339  
 Syphilis, abortive treatment of, 219  
   and dementia paralytica, 297  
   Diagnosis of, from tuberculosis, 221, 249  
   Dog's serum in, 538  
   Extra-genital, 320  
   Hereditary, of bones, 128  
   Intra-cranial, 106  
   Labyrinth disease in, 531  
   of central nervous system, 28  
   of left coronary artery, 178  
   Primary catarrhal, 34  
   spread by cigars, 190  
   Treatment interfering with diagnosis of, 320  
 Syphilitic, auto-inoculation, 318  
   cachexia, 220  
   cardiopathy, 484  
   joint disease, 249  
   reinfection, 220  
   woman, 220  
 Syringomyelia, 51  
 Tabes, dorsalis, pathology of, 427  
   Etiology of, 103  
   Treatment of, 436  
 Tachycardia, 55  
   Essential paroxysmal, 179  
 Tænia, causing intercostal neuralgia, 275  
 Talipes, congenital, 64  
   Equino-varus, 153  
   Incision on concave side of, 115  
   Pathology of congenital, 294  
   Phelps' operation in, 250  
 Tansy, oil of, causing poisoning, 26  
 Tartar, emetic in intestinal catarrh, 68  
 Taste, sense of, in larynx, 92  
 Temperature sense, 561  
 Tendons, divided, treatment of, 448  
 Terpin, hydrate, in hay-fever, 19  
 Testicle, undescended strangulation of, 267  
 Testis, dermoid cyst of, 47  
 Tetanus, 527  
   with facial paralysis, 466  
 Teucrium scordium in pruritus ani, 143  
 Therapeutics, modern, 91  
 Thermometer, sources of error in use of, 156  
 Thiersch's skin-grafting, 475  
 Thrombosis, cardiac, 365  
   Sinus, with ocular symptoms, 404

- Thyroid gland, acute inflammation of, 524  
 extirpation of, in Basedow's disease, 260  
 juice and extract in myxœdema, 539, 540  
 Thyrotomy in young child, 8  
 Tic, convulsive, 196  
 Tobacco in consumption, 373  
 Tongue, surgery of, 402  
 Tonsil, cancer of, 557  
   Cysts of, 298  
   Sarcoma of, 556  
 Tonsillotomy, hemorrhage after, 222, 300  
 Tonsils, glycerine in hypertrophy of, 206  
   Enlarged, enucleation of, 300  
   Hypertrophied treatment of, 7  
   in health and disease, 120  
   Malignant disease of, 300  
 Torticollis, 63  
   due to hæmatoma of sternomastoid, 238  
   Spasmodic recovery from, 334  
 Toxalbumens of staphylococcus pyogenes aureus, 517  
 Tracheal tugging in aortic aneurism, 182  
 Tracheotomy and intubation in Boston hospitals, 119  
   Flexible canula in, 549  
 Trachoma, abscess of, in nerves, 211  
 Transfusion, in pernicious anæmia, 371  
   of nervous matter, 548  
 Trephining, for traumatic epilepsy, 11  
   indications and possibilities, 315  
 Triticum, compound infusion of, 157  
 Tropisin, 547  
 Tubercle bacilli, diagnostic and prognostic value of, 187  
   bacillus, 188  
   in choroid, 344  
   of the pia, 346  
 Tubercular abscess, treatment of, 293  
   joints, old sinusitis in, 63  
   sinusitis in, 153  
   lymphadenitis, surgical treatment of, 523  
   peritonitis, 335, 472  
   sputum, prophylaxis of, 413  
 Tuberculin, in laryngeal tuberculosis, 9  
   experiments with, 506  
   in tubercular nephritis, 384  
   skin diseases, 227  
 Tuberculosis, action of creatin on, 355  
   arrested, 53  
   Calcium muriate in, 67  
   Congenital, 39  
   Contagion in, 241  
   Creosote in, 20, 497  
   diagnosis from syphilis, 221, 249  
   Guaiacol in, 51, 161, 206  
   Heredity and contagion in, 101  
 Tuberculosis, Influence of anthrax virus on, 278  
   Iodoform inunctions in, 413  
   Laryngeal, tuberculin in, 9  
   Local infection of, 225  
   of the urethra, 319  
   of upper air passages, 450  
   Ozonized air in, 5  
   Spontaneous healing in, 52  
   Statistics of, 507  
   Prevention of, 54  
   Prevention of spread of, 278  
 Tuberculous, cervical glands, surgery of, 9  
   endocarditis, 49  
   lesions, involving joints, 250  
 Tubes and ovaries, remote results of removal of, 71, 72, 73  
 Tunica vaginalis, poisoning from cocaine in, 50  
 Turbinate bones, hypertrophy of, treated by flap operation, 8  
 Turpentine, a use of, 408  
   in pneumonia, 414  
 Tympanum, traumatic hemorrhage of, 251  
 Typhoid, bacillus, mixed infection with the streptococcus, 5  
   fever, antiseptics in, 353  
   Aural disorders in, 455  
   Brandt method in, 542  
   Caused by sewer-gas, 31  
   Dietetic treatment of, 307  
   Etiology of, 289  
   Diet in, 459  
   Ehrlich's test in, 32  
   following scarlet, 327  
   Hydriatic treatment of, 542  
   Intestinal antiseptics in, 96  
   in Boston Hospital, 274  
   inutility of ergot in hemorrhage, 70  
   Iron in, 18  
   One mode of infection in, 32  
   outbreaks, causes of, 561  
   perforation, laparotomy for, 23  
   Septic infection in, 493  
   Specific treatment of, 493  
   study of, 326  
   Treatment of hemorrhage in, 69  
   Treatment of tympanites in, 307  
   Turpentine in, 307, 493  
   ulcer, perforated, surgical treatment of, 543  
   Urine in, 274, 570  
 Ulcer, Gastric, cardiac symptoms in, 43  
   Treatment of perforation of, 552  
   Ice-cream in, 162  
   Resorcin in, 269  
   of stomach, frozen milk in, 240  
 Ulna, fracture of head of, 534  
 Umbilical cord, bismuth as dressing for, 22  
   hemorrhage, treatment of, 69  
 Upper lip, epithelium of, 266  
 Urachus, cysts of, 108  
 Uræmic eruption, 46  
 Urea, new apparatus for estimating, 211  
 Urechites, suberecta, 305  
 Urethra, absence of, 377  
   Male, electrolysis in, 419  
   Stricture of, 88, 89  
   Suturing in rupture of, 88  
   Tuberculosis of, 319  
   Tumor of, 319  
 Urethral strictures, relapse after operation, 127  
 Urethritis, bichloride in, 86  
   Endoscope in, 164  
   Silver in, 222  
 Urinary disease, acetone in, 575  
   Single symptoms of, 421  
 Urine, analysis of, 574  
   Effect of asparagus on, 379  
   Electrical resistance of, 358, 571  
   filtered through earth, 90  
   gravity of, in diabetes, 479  
   Hydrogen disulphide in, 379  
   Indigo in, 379  
   in hysteria and epilepsy, 247  
   in phthisis, 336  
   in Typhoid, Ehrlich's test, 274  
   Toxicity of, 4  
 Uterine appendages, preservation of, 97  
   cancer, early treatment for, 442  
   radical treatment of, 73  
   complicated with pregnancy, 512  
   curetting, preparatory to laparotomy, 173  
   displacements, pathology of, 170  
   inertia at full terms, 395  
   injections, cocaine in, 247  
   perforation by curette, 511  
   rupture, caused by division, 444  
 Uric acid, diathesis in children, 422  
   in rheumatism, 234  
 Urticaria, after pepperazine, 547  
   Jaborandi in, 157  
   papulosa, 77  
 Vaccine, blepharitis, 251  
   virus, preservation of, 518  
 Valve, pulmonary, endocarditis of, 89  
 Varicella, hemorrhagic, 464  
   second attack of, 32  
 Varices of lower extremities and abdomen, 128, 500  
 Varicocele, 574  
 Variola, disorders of speech in, 364  
 Vein, saphenous, extirpation of, for varicose ulcers, 109  
   Milk, injections into, 407  
   Uterine, entrance of air into, 219  
 Venous, anastomoses, 571  
   pulsation, 283  
   system, varices of, 127  
 Ventricle, fourth, lesion of, causing glycoma, 335  
   Left, aneurysmal dilation of, 100  
 Ventricular hemorrhage, primary, 330

- |   |  |  |
|---|--|--|
| <p>Veratrum viride, recovery from<br/>  large dose of, 333</p> <p>Vertebral surgery, 60</p> <p>Vertigo, 564</p> <p>Vesiculæ seminales, gonorrhœa of,<br/>  422</p> <p>Viburnum prunifolium, 267</p> <p>Viscera, transposition of, 521</p> <p>Vocalization, conditions hindering,<br/>  452</p> <p>Volvulus of sigmoid flexure, 571</p> <p>Vomiting, hyperdermic use of<br/>  quinine in, 51</p> | <p>Vomiting, strontium bromide in, 357</p> <p>Vulva, hæmatoma of, 239</p> <p>Warm bath in articular inflammation,<br/>  537</p> <p>Water-bed, as affecting body temperature,<br/>  154</p> <p>  as antipyretic, 206</p> <p>Whooping-cough, antipyrine in, 65<br/>  66</p> <p>  bromoform in, 354</p> <p>  naphthalin vapor in, 334</p> <p>  treatment of, 16, 17</p> | <p>Withdrawal, effects of, 321</p> <p>"Wood-wool" in cuspidors, 508</p> <p>Wound, abdominal, ideal dressing<br/>  for, 175</p> <p>Wounds, healing of, under aseptic<br/>  blood-clots, 489</p> <p>Wyeth's hip-joint amputation,<br/>  modification of, 316</p> <p>Xerosis, conjunctiva, 151</p> <p>Zinc chloride injections in fracture,<br/>  with delayed union, 248</p> |
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